

ANALYSIS OF SELECTED MANAGEMENT PERFORMANCE
MEASURES AND THE SOCIOPOLITICAL ENVIRONMENT
OF THE ELDERLY NUTRITION PROGRAM
WITHIN REGION VI

By

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of the Problem.	3
Purpose and Objectives.	5
Hypotheses.	6
Assumptions	7
Limitation.	8
Definitions	8
II. REVIEW OF LITERATURE.	12
The Older Americans Act	12
The Nutrition Program for Older Americans	15
Organizational Performance.	21
Effectiveness	23
Effectiveness Defined.	23
Effectiveness Theory	23
Measuring Effectiveness	24
Maximizing Effectiveness.	26
Productivity.	26
Productivity Defined	26
Productivity Measurement	27
Productivity Improvement	28
Quality	28
Quality Defined.	28
Quality Measurement.	29
Quality Improvement.	30
Innovation.	31
Innovation Defined	31
Role of Management in Innovation	32
Technical vs. Administrative Innovation.	33
Quality of Worklife	34
Quality of Worklife Defined.	34
Quality of Worklife Measurement.	35
Attitudes Toward Aging and the Aged	37
Political Involvement	39
Summary	42
III. METHODOLOGY	43
Population and Sample	43
Instrumentation	44

Chapter		Page
	Collection of Data.	48
	Analysis of Data.	49
IV.	RESULTS AND DISCUSSION	53
	Characteristics of Survey Participants.	55
ee	Education.	56
	State of Residence	57
	Political Party Affiliation.	58
	Registered Dietitian Status.	58
	Route to Registration.	58
	Position Title	59
	Time in Current Position	59
	Previous Employment in the Elderly	
	Nutrition Program.	59
	Years of Previous Employment	60
	Employment Status.	60
	Salary	60
	Benefits Provided.	62
	Professional Organization Membership	62
	Characteristics of the Meal Sites	62
	Size of the Community.	62
	Type of Facility	64
	Services	66
	Transportation	67
	Food Service System.	67
	Meal Service Method.	69
	Days of Service Each Week.	70
	Time of Day Meal Served.	70
	Number of Meals Served	70
	Financial Contribution	71
	Full-Time Employees.	73
	Part-Time Employees.	74
	Volunteers	74
	Performance Measures.	74
	Effectiveness.	74
	Quality of Worklife.	84
	Productivity	85
	Quality.	86
	Innovation	87
	Performance Measures Summary	87
	Attitudes Toward Aging.	87
	Political Activities.	90
	Testing the Hypotheses.	93
V.	SUMMARY, RECOMMENDATIONS, AND IMPLICATIONS.	112
	Summary	113
	Characteristics of the Respondent.	113
	Characteristics of the Meal Sites.	114
	Performance Measures	115
	Attitudes Toward Aging	117

Chapter	Page
Political Activities	118
Testing the Hypotheses	118
Recommendations	125
Implications.	127
BIBLIOGRAPHY.	131
APPENDIXES.	143
APPENDIX A - LEGISLATIVE HISTORY.	143
APPENDIX B - NUTRITION PROGRAM APPROPRIATIONS	148
APPENDIX C - CORRESPONDENCE	150
APPENDIX D - INSTRUMENT DEVELOPMENT	155
APPENDIX E - STATES IN SURVEY SHOWING AREA AGENCIES ON AGING.	179
APPENDIX F - AGING NETWORK.	185
APPENDIX G - CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES BY PROGRAM CHARACTERISTICS. . . .	187
APPENDIX H - T-TESTS SHOWING PERFORMANCE MEASURES BY SERVICES.	203
APPENDIX I - CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES BY DEMOGRAPHIC CHARACTERISTICS. . . .	209
APPENDIX J - T TESTS SHOWING PERFORMANCE MEASURES BY BENEFITS AND PROFESSIONAL ORGANIZATION MEMBERSHIP.	225
APPENDIX K - CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES BY ATTITUDES TOWARD AGING	235
APPENDIX L - CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES BY POLITICAL ACTIVITIES	240

LIST OF TABLES

Table	Page
I. Meal Site Managers Response Rate by State	54
II. Dietitians Response Rate by State	54
III. Benefits Provided	63
IV. Professional Organizational Membership.	64
V. Type of Facility of Meal Site	66
VI. Services Available at Meal Site	68
VII. Number of Meals Served.	71
VIII. Average Financial Contribution.	72
IX. Number of Volunteers.	75
X. Performance Measures Conducted by Dietitians and Foodservice Managers.	76
XI. Frequency of Performance.	80
XII. Attitudes Toward Aging.	88
XIII. Political Activities.	91
XIV. Chi Square Determinations Between Performance Measures and Program Characteristics	94
XV. Chi Square Determinations Between Performance Measures and Demographic Characteristics	99
XVI. Analysis of Variance Results for Political Activities by Demographic Characteristics.	106
XVII. Duncan Multiple Range Test for Political Activities by Demographic Characteristics.	107
XVIII. Chi Square Determinations Between Attitudes Toward Aging and Performance Measures.	109

Table	Page
XIX. Chi Square Determinations Between Political Activities and Performance Measures.	111
XX. Chi Square Table Showing Effectiveness by Meals	188
XXI. Chi Square Table Showing Productivity by Meals.	189
XXII. Chi Square Table Showing Quality by Meals	190
XXIII. Chi Square Table Showing Quality of Worklife by Meals . .	191
XXIV. Chi Square Table Showing Innovation by Meals.	192
XXV. Chi Square Table Showing Total Performance by Meals . . .	193
XXVI. Chi Square Table Showing Effectiveness by Type of Facility.	194
XXVII. Chi Square Table Showing Productivity by Type of Facility.	195
XXVIII. Chi Square Table Showing Quality by Type of Facility. . .	196
XXIX. Chi Square Table Showing Total Performance by Type of Facility	197
XXX. Chi Square Table Showing Effectiveness by Meal Service Method.	198
XXXI. Chi Square Table Showing Productivity by Meal Service Method.	199
XXXII. Chi Square Table Showing Quality of Worklife by Part-Time Employees.	200
XXXIII. Chi Square Table Showing Quality of Worklife by Volunteers.	201
XXXIV. Chi Square Table Showing Innovation by Number of Days of Meal Service	202
XXXV. T-Test Procedure for Effectiveness: Services	204
XXXVI. T-Test Procedure for Productivity: Services.	205
XXXVII. T-Test Procedure for Quality: Services	206
XXXVIII. T-Test Procedure for Quality of Worklife: Services . . .	207
XXXIX. T-Test Procedure for Total Performance: Services	208

Table	Page
XL. Chi Square Table Showing Effectiveness by Position Status.	210
XLI. Chi Square Table Showing Productivity by Position Status.	211
XLII. Chi Square Table Showing Quality by Position Status Status.	212
XLIII. Chi Square Table Showing Innovation by Position Status.	213
XLIV. Chi Square Table Showing Total Performance by Position Status.	214
XLV. Chi Square Table Showing Productivity by State.	215
XLVI. Chi Square Table Showing Total Performance by State . . .	216
XLVII. Chi Square Table Showing Quality by Marital Status. . . .	217
XLVIII. Chi Square Table Showing Innovation by Marital Status . .	218
XLIX. Chi Square Table Showing Quality of Worklife by Title . .	219
L. Chi Square Table Showing Quality of Worklife by Previous Position	220
LI. Chi Square Table Showing Quality of Worklife by R.D. Status.	221
LII. Chi Square Table Showing Effectiveness by Years of Previous Employment	222
LIII. Chi Square Table Showing Quality by Route to Registration.	223
LIV. Chi Square Table Showing Innovation by Sex.	224
LV. T-Test Procedure for Effectiveness: Benefits	226
LVI. T-Test Procedure for Productivity: Benefits.	227
LVII. T-Test Procedure for Quality of Worklife: Benefits . . .	228
LVIII. T-Test Procedure for Total Performance: Benefits	229
LIX. T-Test Procedure for Effectiveness: Organization Membership.	230
LX. T-Test Procedure for Productivity: Organization Membership.	231

Table	Page
LXI. T-Test Procedure for Quality: Organization Membership. .	232
LXII. T-Test Procedure for Quality of Worklife: Organization Membership.	233
LXIII. T-Test Procedure for Total Performance: Organization Membership.	234
LXIV. Chi Square Table Showing Effectiveness by Attitudes Toward Aging.	237
LXV. Chi Square Table Showing Productivity by Attitudes Toward Aging.	236
LXVI. Chi Square Table Showing Quality by Attitudes Toward Aging	238
LXVII. Chi Square Table Showing Total Performance by Attitudes Toward Aging.	239
LXVIII. Chi Square Table Showing Effectiveness by Political Activities	241
LXIX. Chi Square Table Showing Productivity by Political Activities	242
LXX. Chi Square Table Showing Quality by Political Activities	243
LXXI. Chi Square Table Showing Total Performance by Political Activities	244
LXXII. Chi Square Table Showing Quality of Worklife by Political Activities.	245

LIST OF FIGURES

Figure	Page
1. Survey Respondents by Age Group	55
2. Survey Respondents by State of Residence.	57
3. Salary Distribution of Full-time and Part-time Respondents. .	61
4. Size of Community of Meal Site Location	65
5. On Site and Off Site Foodservice Production Methods	69
6. Number of Full-time and Part-time Employees	73

CHAPTER 1

INTRODUCTION

Interest and awareness of the growing numbers of older persons in the United States have been increasing steadily in recent years. More people are living longer and maintaining good health than in preceding generations. This trend, supported by lower fertility rates and ever-improving health care, may be expected to continue.

Among the many areas of society affected by this population shift are that of nutrition services to older Americans. National concern for older Americans may be traced to the Social Security Act of 1935, although it was not until the creation of the Senate Special Committee on Aging in 1959 that public policy-making focused on the elderly (Monk, 1979). In 1965, the Older Americans Act was signed into law by President Lyndon Johnson, and the federal role in the lives of the elderly dramatically increased. Nutrition programs serving the elderly started as research and demonstration projects in 1968 (United States Department of Health, Education and Welfare, 1971), and the Nutrition Program for Older Americans became part of the Older Americans Act in 1972 (Public Law 92-258, 1972).

The Nutrition Program for Older Americans (Title III-C) has become one of the most visible domestic intervention programs. Research conducted at the Congressional level of government revealed that elderly nutrition was one of the four major topics in nutrition policy-making

from 1965 to 1978 (Porter, 1980). The original 1972 Title VII amendment to the Older American Act of 1965 called for the development of a nationwide network of community-based meal programs located in congregate settings within easy access to the elderly. The result of this program strategy has been the establishment of over 13,500 meal sites in 1,150 project areas in all 50 states and six United States Territories. Initial funding of \$100 million in 1972 has increased to \$336 million in 1985 (Appendix B). The Nutrition Program for Older Americans addresses a number of problems faced by the nation's older population. These problems include dietary inadequacy (First Health and Nutrition Examination Survey, 1974; Ten-State Nutrition Survey, 1972), declining health status (Hayflick, 1975; Timiras, 1978), social isolation (Birren and Schaie, 1977) and limited access to social and health services (Binstock and Shanas, 1976).

The Nutrition Program for Older Americans has been the focus of previous studies, with one national research project and numerous local and state projects. Nearly all focus attention on nutritional status of participants versus non-participants, or on the financial accountability of the nutrition service operation. Once funding became available, it was politically imperative to accelerate the implementation process. Emphasis was placed on the development of the program's most readily quantifiable output--the congregate meal. Short-term, politically motivated goals of program visibility and legitimacy led to rapid growth and development of the Title III-C program.

A national study (Kirschner Associates, 1979, 1983) indicated that the Program was successful in meeting nutritional needs of participants, but that management practices at the local level were weak in several

areas. In a study conducted in the Boston area (Posner, 1979), it was found that the Program was making a significant contribution to society, but was still deficient in meeting the needs of the target population. In her study the author suggested program viability should be improved through demonstration of effectiveness. This effectiveness could be demonstrated through program activity or through political activity on the part of program officials. As indicated in the study of congressional policy-making (Porter, 1980), nutrition professionals need to become more involved with public policy issues and activities. A study sponsored by the Administration on Aging (Cain, 1977) suggested that research needs to focus on individuals who stand between the politics of service programs and the delivery of services.

Statement of the Problem

In response to the needs of the elderly population, the United States Congress created an aging service delivery system through the Administration on Aging. Within this system there are regional Area Agencies on Aging administered by regional administrators, and aging service provider agencies at the local level managed by directors under public or private non-profit governing boards. Since the Nutrition Program for Older Americans was created by federal legislation, the feeding of the elderly can be considered to be in the public policy arena. Passage of legislation, however, remains only one part of the policy process. The success of the program, and even its implementation, are not guaranteed by law. The program is best carried out at the local level by local service providers, in this case meal site managers and dietitians.

Research cited in the introductory segment of this chapter indicated the need for studies of local program management personnel. There is a need for knowledgeable and motivated management personnel to be available for providing quality services to older adults participating in the Elderly Nutrition Program. Individuals not qualified for responsible positions may be both inefficient and costly for managing the delivery of services to older adults.

Organizational performance can be measured according to several criteria; among them are productivity, effectiveness, quality, quality of work life, and innovation (Sink, 1983). Prior to determining performance, a manager must use measures in the operation. Without the use of measures, management is unable to recognize performance problems and investigate causal factors. While performance measures have been studied in a variety of industrial settings, previous research at Oklahoma State University (Shaw, 1983; Lamb, 1984; Pickerel, 1984) has focused on dietitians in hospitals, health care facilities, and business and industry operations.

It is important for the development of effective aging service programs to expand the information base for addressing personnel needs. Individuals often bring to their employment positions certain attitudes which possibly may affect the quality of their job performance, and therefore the success of the nutrition program for older Americans. Currently, no research has been conducted on attitudes toward aging as perceived by nutrition service personnel, although literature relating to attitudes may be found in the area of social gerontology (Tuckman and Lorge, 1953; Kogan, 1961; Rosencranz and McNevin, 1969; Green, 1981). Political activities of individuals associated with the Elderly

Nutrition Program have never been studied, and this area in general has not been the focus of research. Past studies of the Program have, however, indicated a need for such research and emphasize the political awareness of individuals employed in the Program.

This interdisciplinary study addresses these three identified needs within the Elderly Nutrition Program: measurement of management performance, attitudes of management personnel towards aging, and political activities of management personnel. Knowledge of factors affecting organizational performance may provide a basis for developing education and training programs and for helping in the establishment of short and long-term goals.

Purpose and Objectives

The purpose of this study is to investigate the relationship of selected sociopolitical factors and selected management performance measures among nutrition service management personnel in the Older Americans Act Nutrition Program for Older Americans (Title III-C). Results of this study may assist program administrators in the development of employment standards, continuing education programs, and management development. Results of this study may also provide the initiative for increased public policy involvement of individuals associated with the Nutrition Program for Older Americans.

The specific objectives of this study are as follows:

1. to assess the level and type of program activity of the elderly nutrition service as associated with management performance measures;

2. to relate demographic variables such as age, gender, education level, time employed in current position, site location, and salary to management performance measures;

3. to assess the level and type of program activity of the elderly nutrition service as associated with nutrition service providers' attitudes toward aging and the aged;

4. to relate demographic variables such as age, gender, education level, time employed in current position, site location, and salary to nutrition service providers' attitudes toward aging and the aged;

5. to assess the level and type of program activity of the elderly nutrition service as associated with nutrition service providers' selected political activities;

6. to relate demographic variables such as age, gender, educational level, time employed in current position, site location, and salary to nutrition service providers' selected political activities;

7. to relate nutrition service providers' attitudes toward aging and the aged to management performance measures;

8. to relate nutrition service providers' selected political activities to management performance measures.

Hypotheses

The following hypotheses were postulated for this study:

H : There will be no significant difference between the level and
1
type of program activity of the elderly nutrition service and management performance measures.

H : There will be no significant difference between demographic
 2
 variables such as age, gender, education level, time employed in current position, site location, and salary and management performance measures.

H : There will be no significant difference between the level and
 3
 type of program activity of the elderly nutrition service and nutrition service providers' attitudes toward aging and the aged.

H : There will be no significant difference between demographic
 4
 variables such as age, gender, education level, time employed in current position, site location, and salary and nutrition service providers' attitudes toward aging and the aged.

H : There will be no significant difference between level and type
 5
 of program activity of the elderly nutrition service and nutrition service providers' selected political activities.

H : There will be no significant difference between demographic
 6
 variables such as age, gender, education level, time employed in current position, site location, and salary and nutrition service providers' selected political activities.

H : There will be no significant difference between nutrition
 7
 service providers' attitudes toward aging and the aged, and management performance measures.

H : There will be no significant difference between nutrition
 8
 service providers' selected political activities and management performance measures.

Assumptions

1. Data collected for this research are dependent on respondents' perceptions of the importance of the study.

2. That the population represents a normal distribution of all Elderly Nutrition Program management personnel.

3. That foodservice management personnel will have sufficient knowledge of performance measures to complete the questionnaire.

4. That responses of survey participants are honest.

Limitations

The population to be studied consists of meal site managers and meal site dietitians of elderly nutrition service programs in Region VI of the United States Older Americans Act Title III-C program. This region includes the states of Texas, New Mexico, Oklahoma, Arkansas, and Louisiana. As such, generalizations are applicable only to this region's population, however, generalizations may be of help to those studying similar populations in other regions, or other individual states. There will be no attempt on the part of the researcher to make conclusions about individual behavior of the respondents.

Definitions

Definitions of terms used in the proposed study are as follows.

Administration on Aging (AoA). A division of the Office of Human Development in the Department of Health and Human Services, Washington, D.C. Responsible for coordinating programs, services, and research to help older Americans (Gelfand and Olsen, 1980).

Aging. A general term used for various biological, psychological, and social processes whereby an individual acquires the socially defined characteristics of old age (Atchley, 1980).

Aging Service Provider Agency. Local public or private body charged with the responsibility of carrying out the provision of the Older Americans Act.

Area Agencies on Aging (AAA). Local organizations established by the 1973 amendments to the Older Americans Act in an effort to expand local services planning and delivery for the elderly (Lammers, 1983).

Attitude. An enduring organization of beliefs about an object or situation predisposing one to respond in some preferential manner (Rokeach, 1976).

Consultant Dietitian. Advises and assists personnel in public and private establishments, such as hospitals, health-related facilities, child-care centers, and schools in foodservice systems and nutritional care of clients; evaluates and monitors all aspects of foodservice operation, making recommendations for conformance level that will provide nutritionally adequate, quality food; plans, organizes, and conducts orientation and in-service educational programs for foodservice personnel; develops menu patterns; assesses, develops, implements, and evaluates nutritional care plans and provides for follow-up, including written reports; consults with health care team concerning nutritional care of client; confers with designers, builders, and equipment personnel in planning for building or remodeling foodservice units (U.S. Bureau of Employment Security, 1980).

Dietitian. A term applied to persons who possess educational qualifications, work experience, and license or certification for employment in various fields of dietetics, such as research, consultation,

administration, community, and clinical. Classifications are made according to specialized areas of employment (U.S. Bureau of Employment Security, 1980).

Effectiveness. The degree of achievement of objectives (Smalley and Freeman 1966).

Meal Site Manager. One who assumes responsibility for administration of an elderly nutrition foodservice operation but does not have the credentials of a registered dietitian (West, Wood, Harger, and Shugart, 1977).

Nutrition Service. Activities directly associated with the serving of food, dispensing of nutrition information, and analysis of nutritional status.

Nutrition Service Provider. An individual performing duties as a foodservice manager/supervisor or a dietitian within the Elderly Nutrition Program.

Older Americans Act (OAA). Federal legislation enacted in 1965 to promote and coordinate programs for the elderly. The Act established the Administration on Aging (AoA) and State Units on Aging (SUA) (Lammers, 1983).

Older Person. Conceptually, an individual in later maturity or old age stages of the life cycle. Socially, people are usually classified as older if they are chronologically 65 or older. Legally, there are several chronological ages that are used to define people as old, beginning as early as 45 (Atchley, 1980).

Public Policy. A purposive course of action followed by government dealing with some topic or matter of public concern (Porter, 1980).

Registered Dietitian (R.D.). A specialist responsible for the nutrition care of individuals and groups. This person meets the qualifications established by the Commission of Dietetic Registration of The American Dietetic Association, has successfully completed the examination for professional registration, and maintains continuing education requirements (Anonymous, Journal of the American Dietetic Association, 1981).

State Units on Aging (SUA). The organizations established in each state to promote policies for the aging and administer programs under the Older Americans Act (Lammers, 1983).

CHAPTER II

REVIEW OF LITERATURE

The review of literature begins with a discussion of the Older Americans Act and the Nutrition Program for Older Americans. The second phase of the review focuses on organizational performance, specifically the five measures utilized in the current study. A discussion of attitudes directed toward aging and the aged, and political involvement complete the review.

The Older Americans Act

In 1945, the first state unit on aging was established with the organization of the Connecticut State Commission on the Care and Treatment of the Chronically Ill, Aged, and Infirm. President Harry S. Truman sanctioned the first Federal Aging Conference in 1950, prompting many states to begin programs for the aged. By the late 1950's, Congress has started the process of determining the federal role in aging programs. Prior to the White House Conference on Aging in 1961, every state had established an official unit to deal with the area of aging. The main report of the 1961 Conference recommended federal legislation to help the states initiate or expand state and community programs for older persons. In early 1963, President John F. Kennedy addressed Congress with a speech recommending a five-year program of assistance to state and local agencies and voluntary organizations, for planning

developing services, for research, demonstration, and training projects which might lead to new or improved programs for elderly persons. Following Kennedy's speech, two major bills were introduced into Congress, one implementing the President's recommendation and the other going a step further by proposing the creation of an Administration on Aging. Neither of these bills received enough support, and never got past committee action. In 1964, another bill was introduced containing similar provisions, but it too never got past committee action.

In 1965, the Older Americans Act of 1965 was introduced and attracted bipartisan support. President Lyndon Johnson signed the law (Public Law 89-73) on July 14, 1965. The Act established an Administration on Aging within the Department of Health, Education, and Welfare, provided grants for demonstrations and research on aging, training grants for persons to work in the field of aging, financial support of the State Units on Aging, and funds for states to use in supporting projects for the aging. Congress appropriated \$6.5 million for fiscal year 1966 to the programs. Each state had to submit and have approved a state plan of action. Five states qualified for grants during 1965, while 35 others, plus the District of Columbia and Puerto Rico, qualified in 1966. The original Act was authorized for only a two-year period, so in 1967 the Act was amended and extended (Public Law 90-42). The 1967 amendments extended the Act for two years, increased authorizations for grants and contract programs, and helped to clarify the Act and improve its effectiveness. In 1969, the Act was again amended (Public Law 91-69) and extended for three years.

The second White House Conference on Aging was held in 1971, at which time the participants proposed recommendations to improve existing

programs and policies on aging, and to recommend new ones. In one of the recommendations, attention was focused on nutritional needs of older persons, and specifically on the need for the establishment of the equivalent of a National School Lunch Program for the elderly. This recommendation became law on March 22, 1972, with the enactment of Public Law 92-258, adding Title VII to the original Act and authorizing a Nutrition Program for the Elderly. The creation of a nutrition program followed years of research and study in the area of elderly nutrition. In 1967, President Lyndon Johnson suggested Congress establish a pilot program to provide nutritious meals in senior citizens centers. Congress appropriated \$2 million in early 1968 for a three-year national nutrition demonstration and research program. Thirty-one projects tested various approaches and hypotheses toward feeding the elderly, and were very successful. Further support for a national program came from the 1969 White House Conference of Food, Nutrition and Health, the 1970 Presidential Task Force on Aging, and the 1971 Conference. Congress appropriated \$100 million for the Nutrition Program beginning July 1, 1973.

In 1973 the Act was again amended, this time by the Older Americans Comprehensive Services Amendments (Public Law 93-29). This amendment created area agencies on aging within each state to carry out authorized plans. Also created by these amendments was a Federal Council in Aging, whose purpose was to advise and assist the President in dealing with issues affecting older Americans. In 1974, the Act was amended to extend authorization of the nutrition program for three years (Public Law 93-351). While the 1974 amendment affected the nutrition program, all other areas of the original Act were amended in 1975. The 1975

amendment (Public law 94-135) also specified four national priority services, authorized grants to Indian tribes, authorized an Older Americans Community Service Employment Program, and enacted the Age Discrimination Act. The 1977 Amendments (Public Law 95-65) provided additional support for age discrimination programs and changed the wording related to surplus commodity availability for nutrition programs.

The 1978 Amendments (Public Law 95-478) extended the original Act through 1981, and consolidated various Titles of the Act. The new Amendments required three-year plans of action from each state, and called for a 1981 White House Conference on Aging. The 1981 Omnibus Reconciliation Act affected the Older Americans Act by limiting appropriations for each of the next three years. In December, 1981, President Ronald Reagan signed the 1981 Amendments (Public Law 97-115), which authorized the Act for three years and gave greater flexibility to states for drawing up proposed plans of action. In the present administration, many programs have been completely eliminated, others drastically reduced, while some have maintained stable levels. For a complete review of the legislative background of the Older American Act, see Appendix A.

The Nutrition Program for Older Americans

The OAA provided the legislative framework for authorized research in the area of elderly nutrition. Under Title IV provisions, grants were available for research and demonstration projects in the field of aging. It was not until 1968, however, that any significant work in this area took place. Research efforts in determining nutritional

status of the aged were continuing at this time. In 1965, the United States Department of Agriculture (USDA) conducted a nationwide Household Food Consumption Survey (Agricultural Research Service, 1966) which identified decreased nutrient intake with advancing years. A study of 252 professionals in the Baltimore-Washington area also found decreased nutrient intake with advanced years, which the researchers associated with falling basal metabolic rates and activity levels (McGandy, Barrows, Spaniers, Meredith, Stone, and Norris, 1966). A study of the elderly in Syracuse found deficiencies in ascorbic acid, vitamin A, thiamine, and riboflavin (Dibble, Brin, Thiele, Peel, Chen, and McMullen, 1967).

In early 1967, President Lyndon Johnson delivered a talk focusing on the elderly to Congress (U.S. Congress, 1967). In that speech the President recommended further government support for programs dealing with the elderly. As a result, in early 1968, Congress appropriated \$2 million for a three-year nationwide research and demonstration program of nutrition for the elderly to be conducted by the Administration on Aging. Thirty-two projects were funded from July, 1968 through June, 1971. Twenty-three of these were community and neighborhood level demonstrations, while nine were research type projects. Each was designed to include five elements: (1) the provision of meals in group settings or on a home-delivered basis; (2) nutrition education and information; (3) systematic evaluation; (4) the provision of supportive services; and (5) outreach services to find those most in need of such services (FNKI Research Institute, 1971).

Data from these projects were collected and analyzed by the ENKI Research Institute (1971). Information was summarized into three

categories: (1) costs of nutrition services; (2) characteristics of participants; and (3) data regarding changes in the nutritional levels and diets of participants. The cost summary indicated most projects were similar in costs, with differences accounted for by administration and efficiency factors. In addition, higher costs resulted when sites were operated less than five days a week, and when less than 100 meals were served daily. Demographic data from the study indicated the average age of a participant at 71 years, with two-thirds female and one-third male. Racial distribution varied quite widely. Educational level was equivalent to eighth grade. Most participants were classified as low-income, and many were on public assistance. Additional information revealed a need for more public transportation to assist the elderly. When asked what they liked best and least about the project, most participants reported they liked meals best, association with people a close second, with a lack of transportation least liked. Dietary analysis indicated that most participants consumed marginal diets, with deficiencies noted in calories, protein, vitamins, and minerals. Researchers believed nutritional improvement had resulted since the project provided one-third of the Recommended Dietary Allowances (RDA). Improvement of participants' dietary practices was not, however, evident. It was felt that a variety of factors prevented participants from translating new dietary knowledge into personal habit.

The popularity of these projects led to their extension in 1971. At the same time, two significant nutritional surveys were being conducted. The Health and Nutrition Examination Survey (HANES) of 1971-72, and the Ten State Survey, which was conducted in the late 1960's. HANES analyzed a national probability sample of persons aged 1 to 74 with

findings that showed half of the elderly were consuming inadequate diets. The Ten-State Survey studied low income population groups and also found nutrient deficiencies in elderly diets. As a result of the interest generated through research and demonstration projects, the OAA was amended in early 1972 to include a nutrition component (Public Law 92-258, 1972). The 1972 amendments authorized a national nutrition program for the elderly for developing congregate meal projects, and when possible, home-delivered meal programs.

Although the Nutrition Program for Older Americans (NPOA) was signed into law on March 22, 1972, funds were not appropriated for fiscal year 1973. Not until the end of fiscal year 1973 was funding of \$100 million provided, and at the same time an extension of such funding was allowed for fiscal year 1974. For a listing of appropriations for the program, see Appendix B. Under Title VII of the amended OAA, the NPOA became a part of the social services program of the growing Area Agencies on Aging (AAA). The intent of policy-makers was to have one planning authority for all funding.

Although it was the AAA which directly controlled the project sponsor, the State Unit on Aging (SUA) was also involved. Both the SUA and the AAA were required to design three-year plans which included provisions for congregate meal programs and home-delivered meals. The AAA plans were approved by the SUA, which then incorporated such data into its own three-year plan. The SUA was approved by the Governor and the United States Commissioner of Aging. After approval, each state was awarded funding based on its proportionate share of persons aged 60 and older. The state then divided its monies based on geographical distribution of persons aged 60 and older.

Each nutrition project under Title VII funding incorporated the major components emphasized by Title IV research and demonstration projects. These elements included congregate meal service, nutrition education, supportive services, outreach, and evaluation. In addition, Title VII promoted the utilization of older persons in staffing, the use of transportation to encourage participation, and the importance of accessible sites. The most significant difference was the role of the state. During Title IV projects, the state role was minimal; but with Title VII, the state essentially controlled the funding for nutritional projects.

Public Law 92-258, or the NPOA, was instituted with four major goals: (1) to provide persons aged 60 years and older and their spouses regardless of age, particularly those with low income and minority individuals, with low cost, nutritionally sound meals in strategically located centers; (2) to promote better health among the older segment of the population through improved nutrition; (3) to reduce the social isolation of old age; and (4) to offer older Americans an opportunity to live out their remaining years in dignity (Public Law 92-258, 1972).

During the drafting of regulations for the program all reference to health-care professionals was eliminated, leaving program responsibilities under the auspices of the SUA. In 1973, a decision was made that required all Title VII programs to be operational on the very first day budgeted, and to be completely operational at the level approved by their grant in 90 days. This decision was seen as a move to demonstrate the quantifiable program goal--meals served on a daily basis. Such a decision provided program visibility and assured federal funding.

However, the result of these changes led to deviation from the goals of health and nutrition.

Within a short time, policy-makers recognized that the program was not reaching the target group of low income, isolated elderly. In addition, there seemed to be an increasing number of meal service purveyors rather than program-operated kitchens. The Title VII program was reviewed by a Senate Select Committee in late 1974, which proposed that programs start acting on legislated goals. As a result of this committee, staffing was improved at Title VII sites, the nutrient standard method of menu planning and monitoring was introduced, and a longitudinal evaluation of the program was inaugurated.

The need for general program evaluation has been apparent since the Title IV demonstration and research projects began in 1968. Although recognized at the time, the program evaluation conducted was incomplete, and conclusive results were not obtained. Researchers pointed out that evaluation of the program was complicated by the multiplicity of goals, and often the only aspect of the program to be effectively analyzed was the administrative component (Cain, 1977). There was scant evidence that showed that those receiving services were the most needy. Research showed improved nutritional status in some program participants and no change in others. The nutrition education component had minimal effect on participants, primarily due to the difficulty of changing life-long habits, and also to the infrequency of such education sessions.

In 1975, plans were initiated for a longitudinal evaluation of the program. The results of the First-Wave findings (Kirschner Associates, 1979) described the data collected in 1976 and early 1977. Further data were still being analyzed at this time. Research indicated that the

program was meeting dietary needs as measured by the RDA, was attracting participants who live alone and belong to a social or religious group, needed to create more awareness of the nutrition education component, and was providing satisfactory meal service to participants.

Results of the Second-Wave findings (Kirschner Associates, 1983) were obtained during 1982. During the period between evaluations the number of meal sites more than doubled, as did the total number of meals served. Increased nutrient intake was found to be directly related to participation in the program. Social benefits were rated even higher than the meal itself by participants. Participants were likely to be single, female, live alone, and have an income below \$6,000. Recruitment and outreach activities were less extensive than in past years. Record keeping practices improved, and the report indicated this as a major area for improvement. Nutrition education practices continued to be offered but appeared to have little or no impact upon dietary practices.

Organizational Performance

Organizational performance (OP) is often measured to assist in the study of organizational structure, strategy, and planning. Organizational performance is viewed from several distinct frameworks. The goal approach (Etzioni, 1964) recognizes the organizational pursuit of identifiable goals. The process approach (Steers, 1977) perceives OP as the result of behavior of organizational members. The system resource approach of Yuchtman and Seashore (1967) examines internal and external factors affecting organizational survival. Thompson's constituency approach (Thompson, 1967) defines the purpose of the organization as

benefitting multiple constituencies, both internal and external, through needs fulfillment.

It becomes apparent that OP consists of a multidimensional character, and as such is difficult to operationalize as a concept. Most research efforts in studying OP focus on a measure of performance correlated with an organization characteristic. This procedure assumes that certain rational linkages exist among these variables (Benson, 1977).

A constituent approach recognizes that organizations face multiple and often conflicting performance expectations, but some performance criteria are likely to be more beneficial to decision makers at certain points than other criteria. As so stated, performance criteria are dynamic. The constituent approach takes into account the goal, systems resource, and process models, and includes them in a general framework. Some constituents may apply a goal approach; others may use a systems resource approach; and some may use a process approach. This recognizes the multidimensional nature of performance, and the need for multiple evaluations. It is, therefore, possible to be assessed both positively and negatively on any or all evaluations (Hage, 1980). The constituent approach indicates that three issues be addressed prior to assessing OP. First, relevant constituencies must be identified. Second, constituent expectations and the time frame over which they are obtained must be established. Third, the relative salience of constituent's expectations to the organization's decision makers must be assessed (Ford and Schellenberg, 1982).

An organization may be evaluated through the use of multiple criteria. Szilagyi (1981) lists fourteen such criteria, which Sink (1983) reduces to seven; effectiveness, efficiency, productivity,

profitability, quality, innovation, and quality of worklife. Previous research at Oklahoma State University (Shaw, 1983; Lamb, 1984; and Pickerel, 1984) has studied these criteria, in whole or in sub-units, and their application in foodservice operations. The current study focuses on five of the stated criteria; effectiveness, productivity, quality, innovation, and quality of worklife.

Effectiveness

Effectiveness Defined

Effectiveness is often used as the sole criterion of organizational performance (Budde, 1979). Drucker (1974, p. 45) refers to effectiveness as "doing the right things." Georgopoulos and Tannenbaum (1957) viewed effectiveness of the organization as a complex issue, yet noted the lack of research in the area. This viewpoint is similar to Goodman and Pennings (1980) in that effectiveness is recognized as necessary for organizational survival, yet there is no clear criterion of measure.

Effectiveness Theory

The numerous definitions of effectiveness may be classified according to three major approaches. The goal achievement theory is the most widely accepted. Etzioni (1960), and Haimann and Scott (1974), consider effectiveness to be the degree to which an organization reaches its goals. As noted by Hall (1980), this approach becomes increasingly complex with multiple and often conflicting goals in many organizations. The open systems model defines effectiveness of an organization as how well the organization obtains and utilizes its resources (Hoy and Miskel, 1982). Bluedorn (1980), and Seashore and Yuchtman (1977),

perceive effectiveness as the ability to exploit the competitive environment in pursuit of limited and valuable resources. The third approach, referred to as the structures and process theory, includes factors which are actually determinants of some type of goal achievement and not goals themselves. Each of these paths conceive effectiveness from a macro view. Effectiveness measurement in an organization must consider operational goals within environmental constraints.

Measuring Effectiveness

According to Quade (1982), the sign of a good effectiveness measure is that it closely reflects the objective. Often surrogate measures are used to assess effectiveness. Such measures as production, turnover, absenteeism, growth and decline, and client satisfaction were included as indicators of effectiveness by Katz and Kahn (1971). Some measures may be appropriate for particular organizations and inappropriate for most others. Hoy and Miskel (1982) conclude that only four true indicators of effectiveness exist, adaptability, achievement, job satisfaction, and central life interests. These elements include criteria noted by Steers (1975) and Katz and Kahn (1971). Atchison and Hill (1978) use goal statements as performance standards in measuring effectiveness. Since organizations are dynamic organisms this approach is difficult. The use of quantitative measures is an objective approach, but limited by the subjective interpretation of management. Some researchers have chosen to measure effectiveness as the subjective evaluations of knowledgeable observers. Observer opinions as outcomes of the organization are legitimate effectiveness measures (Kirchhoff, 1977). Price (1972) suggests four guides on which to

focus: organization goals, operative goals, manager intentions, and activities. Mahoney (1967) factor analyzed manager evaluations of 114 variables indicative of organization effectiveness and found 24 factors. Mahoney and Weitzel (1969) related these factors to managerial judgments of overall effectiveness through regression analysis. The results are similar to the Yuchtman and Seashore (1967) model of ultimate, penultimate and subsidiary criteria. Another evaluative instrument was developed by Mott (1972), and contains measures of ten dimensions, all correlated with managers' overall performance evaluations and with each other. Multiple equation models of effectiveness expressing various goals of the organization are one route for future research. To accomplish this, each factor (criterion) can be used in a multiple regression equation.

Problems with Effectiveness Management

As noted earlier, an effectiveness measure needs to be specific to a particular organization. Steers (1975) stresses the need to focus on more flexible models for measuring effectiveness, and lists probable problem areas: (1) construct validity, (2) criterion stability, (3) time perspective, (4) multiple criteria, (5) precision of measurement, (6) generalizability, (7) theoretical relevance, and (8) level of analysis. Quade (1982) notes the problems in measuring effectiveness in the public sector; (1) benefit measurement; (2) data unavailable, of poor quality, or unable to organize; (3) benefits of government expenditures not reflected in the open market; and (4) benefits and costs may go to different constituencies. He cautions against measuring effectiveness as costs, workload measures, or common index of worth. Scott (1977),

and Goodman and Pennings (1980) note that there can be no single construct of organizational effectiveness. It is necessary to utilize particular measures of effectiveness for particular components of organizations.

Maximizing Effectiveness

Drucker (1974) stresses the relevance of the Pareto principle to management: concentrate efforts on those activities capable of being effective. Georgopoulos (1972) stated that effectiveness in a health care setting will be determined by organizational adaptation, allocation, coordination, integration, strain, output, and maintenance. Drucker (1974) defines an effective service organization as one which specifically defines their business; one which derives goals from that definition; one which sets standards of accountability; one which defines performance measures; one which utilizes such measures as feedback; and one which evaluates goals to identify those in need of revision.

Productivity

Productivity Defined

Productivity is viewed as a relationship between outputs and inputs. The concept has been defined as reaching the highest level of performance with the least expenditure of resources (Mali, 1978). Welch (1975) refers to productivity as the efficiency of a given input at producing a specified output. Productivity is viewed as a measure of effectiveness (Burley, 1981), and calculated by determining the outputs

resulting from a combination of managerial and worker attitudes and skills, and the utilization of physical equipment and facilities.

America is currently concerned with the concept of productivity, particularly in response to global market demands. Decline in American productivity can be equally shared by business, labor, and government. Drucker (1974) indicates that a decline in productivity is likely caused by poor managerial performance. Poor productivity in foodservice operations has been linked to employee downtime, poor kitchen design, poor motivation, inadequate incentives, and poor selection and recruitment.

Productivity Measurement

Measurement of productivity enables an organization to determine how well resources have been utilized in the production of goods and/or services. This measurement also indicates the performance of management, as management is ultimately responsible for the acquisition and utilization of resources. Measurement requires measures be developed for the decision process, which leads to different types of measures (Mark, 1971); measures which focus on operational issues, measures which focus on organizational or program outputs, measures which focus on organizational or program outputs, and measures which are concerned with program impact. Productivity measurement is the process by which outputs and inputs are selected, ratios developed, and standards set. Selection of the proper measure of output requires a service-and-product-oriented approach. Foodservice produces a concrete end product which can be counted. Balk (1975) notes that measurement is made simpler when workers perform routine tasks which vary little on a day-to-day basis. A frequently used measure of input is labor, with the

preferred measure being labor hours. Examples of productivity measures commonly found in foodservice are meals served per labor hour worked and absenteeism or turnover per labor hour worked. Day (1981) suggests that there are three steps involved in productivity measurement: development of work standards, selection of a partial productivity measure for the particular organization (the ratio of gross or net output to one particular input), and the use of total measures (materials, energy, labor, and capital as inputs).

Productivity Improvement

Once productivity is measured, it can then be analyzed for improvement (White, 1979). The needs of the organization determine which means of improvement are taken, as well as how productivity is measured in general. Buehler and Shetty (1981) list top management support and worker involvement at all levels as key elements of any productivity program. The first step toward productivity improvement is productivity measurement (Magill, 1973; Shaw, 1983). There are three basic classification schemes for productivity improvement (Wise, 1980): work simplification, identified opportunities, and major structural changes. Examples of such techniques in the foodservice industry are standardization of menu items, off-premise food preparation, and innovative cooking equipment (Carnes and Brand, 1977).

Quality

Quality Defined

Quality was rated as the most important performance criteria in terms of time spent and importance in a study of dietitians with

management responsibilities (Shaw, 1983). According to Scanlon and Hagan (1983), quality can only mean conformance to a standard. Quality has been defined simply as fitness for use (Juran and Gryna, 1980,) and as complex as the degree to which a product or service conforms to a set of predetermined standards related to the characteristics that determine its value in the marketplace and its performance of the function for which it was designed (Adam, Hershauer, and Ruch, 1981). Szilagyi (1981) notes that quality is composed of distinct dimensions; function-performing its intended purpose; reliability and durability-how long it will perform its function; aesthetic characteristics-how does it look; and safety-performance of function without endangering a user.

Quality Measurement

Traditional quality measurement in foodservice has centered on the testing of food by various personnel. Individual sensory evaluation is however, influenced by outside sources, as well as the existence of possible differences between quality standards of the personnel and those of the eventual consumer. Health care organization often have quality standards dictated by federal, state, and local regulations, as well as professional standards issued through the Joint Commission on Accreditation of Hospitals. Edgecumbe (1966) reports on the Commission for Administrative Service in Hospitals (CASH) quality control system in Los Angeles. This system measures the quality of food preparation, service, housekeeping, and sanitation. The Food Service Manual for Health Care Institutions (Mahaffey, Mennes, and Miller, 1981) infers that quality is a multidimensional concept which should be based on sensory, nutritional, and microbiological criteria. Ruf and David

(1975) list product quality characteristics of appearance, taste, texture, and temperature; service measures of appearance and accuracy of items served; and sanitation quality as the cleanliness and orderliness of the preparation and service areas. Enhancing quality in an organization requires improvement of standards through actions of management, production staff, and service personnel. To improve quality, it is necessary to implement a program of continual quality measurements, analysis, and corrective action.

Crosby (1979) states that quality management is a systematic way of guaranteeing that activities happen the way they are planned. It has been suggested that subjective quality measures be quantified into objective data (Ferdeber, 1981). Inputs and outputs would be measured, as well as technological, behavioral and economic factors. According to Shaw and Capoor (1979), quality can be improved through managerial policies of organizational planning, management, and operational control. Quality control in foodservice organizations is usually conducted on the final product, although Szilagyi (1981) notes the difference between feedback type, as above, and feedforward quality control. The latter focuses on raw materials and the work in process. Hershauer (1979) also notes the difference of little emphasis on measurement of causal factors or resources utilized in quality control.

Quality Improvement

Quality assurance (Snider, 1983) can be defined as a management process by which customer expectations are met, without error, every time. Quality may be measured through use of opinion polls, analysis of complaints and compliments, market research, or a review of competitive

activities. The resulting information can be used to establish quality standards for the organization. Quality assurance enhances organizational effectiveness through containment of costs, preservation of value, attraction of valuable resources, and increased bureaucratic responsibility (Hetherington, 1982).

In today's organization, there must be employee involvement or quality improvement will be limited (Hershauer, 1979; Sink, 1982). Strategies such as re-education, persuasion, facilitation, and coercion have been suggested as means to use in a quality assurance program (Kaluzny, 1982). Hershauer (1979) notes the relevance of a holistic approach to the organization and product(s). An understanding of the potential market can create a feeling of responsibility for the quality of product(s).

Unsatisfactory quality refers to undesirable results caused by unwanted and unnecessary variations in performance (Scanlon and Hagan, 1983). The problem usually occurs when personnel set their own standards of performance. A quality control system must be established which sets performance standards, measures actual performance, and initiates quality improvement on a continuous basis.

Innovation

Innovation Defined

Innovation is often referred to as applied creativity, or a specific change aimed at accomplishing the goals of the organization more effectively (Mueller, 1971). Gee and Tyler (1976) suggest that innovation is a phase where information is utilized in a novel fashion. This

viewpoint is similar to that of Levine (1982), who noted innovation as a process of implementing new problem-solving ideas. Mintzberg (1983) also views innovation as a means of incorporating new ideas into the organization. These concepts suggest that for innovation to exist within an organization, there must be avoidance of bureaucratic structures which inhibit individual or group creativity. It has been suggested that the success of innovation implementation is dependent upon general organizational cultural norms (Deal and Kennedy, 1982).

Role of Management in Innovation

Upper-level management plays a key role in organizational innovation. The interaction of power and communication can lead to successful adoption of innovation concepts within the organization (Fidler and Johnson, 1984). Bellas and Olsen (1978) recognized four characteristics of successful innovating organizations: a managerial commitment to innovation; a means of directing research to achieve organizational goals; a system for testing alternatives and making decisions; and a means of implementation.

A significant number of innovative studies focus on the method of communication to members of the organization (Rogers and Eveland, 1978). Empirical studies have centered on diffusion of innovation within organizations (Romeo, 1975; Levine, 1980) or have investigated existing associations between a measure of organizational innovativeness and different organizational variables (Rosner, 1968; Aiken and Hage, 1971; Baldrige and Burnham, 1975). To date, there is little research exploring the relationship between adoption of innovation and organizational growth or performance.

Technical vs. Administrative Innovation

It is necessary to distinguish between technical and administrative innovation. Both are equally essential to the growth and effective operation of an organization (Evan and Black, 1967; Kimberly and Evanisko, 1981). Technical innovation is perceived as a means of changing and improving performance in the technical system, while administrative innovation is viewed as occurring in the social system and affecting the relationships among people who interact to accomplish a particular goal (Zaltman, Duncan, and Holbek, 1973). It has been suggested that the latter lags behind in organizations (Evan, 1966).

Mahoney and Weitzel (1969) identified innovation as a criterion of organizational performance. Considering the dual nature of innovation, changes in organizational systems should be introduced so that the technical and social systems remain in balance and reinforce each other. The administrative sector retains OP as its overriding concern, and provides conditions which enable members of the technical sector to introduce innovations (Daft, 1978). The adoption of administrative innovation thus facilitates the adoption of technical innovation. The combination of related changes in the social and technical systems enable the organization to maintain the level of performance in response to environmental changes.

Economic appraisal of innovation cannot be restricted to physical inputs and outputs (Gold, 1980). White (1975) offers numerous suggestions for innovation evaluation: longer time period for analysis; job evaluation; method studies; staff inspection; and activity sampling.

Quality of Worklife

Quality of worklife (QWL) has been defined as the effective responses of participants in a system to socio-technical aspects of the system (Sink, 1982). As with other indicators of performance there are numerous definitions of QWL. All definitions focus attention on the individual within the organization. It is widely assumed that today's worker is generally less satisfied with their work than their predecessors. Many employees believe that their needs are not being met by work. Over thirty years ago Drucker (1954) noted the importance of workers having some control over their work.

QWL Defined

The first conceptualization of QWL (Walton, 1974) indicated alternatives to accommodate different definitions of QWL. These choices included tailoring work assignments to meet individual preferences; organizing work differently from unit to unit; and allowing employees to choose which style suits them best. Glaser (1976) suggests that the essential component of a QWL program is the opportunity for employees at any level to influence their working environments, and to have some say over what goes on in connection with their work. An integral element of such a program is a style of participative management which allows employees to input ideas to the organization. The General Motors Corporation (GMC) has become a leader in QWL programs. The objective of these programs is to make work effective, challenging, and involving (Fuller, 1980). GMC recognizes that QWL is a process of developing an awareness and understanding of the needs of others and a willingness to be more responsive. The American Society for Training and Development

(ASTD) defines QWL as a process for organizations which allows members at all levels to actively participate in shaping the organization (Skrovan, 1980). The Work in American Institute identified those issues most critical to QWL: pay, benefits, job security, alternative work schedules, occupational stress, participation, and democracy in the workplace (Rosow, 1981). The Graphic Controls Corporation (GCC) and the Institute for Social Research of the University of Michigan studied QWL for five years at GCC (Lawler and Mirvis, 1981). This QWL study focused on characteristics of the organization, the workplace, and the work itself that influenced employee satisfaction, well-being, and behavior on and off the job. Tuttle (1982) notes that QWL can be viewed as a process, an outcome, or a combination of the two. The outcome approach can be appropriately called job'satisfaction, while the process approach more clearly presents QWL. Sweeney (1982) also views QWL as a process, one which involves employees in problem-solving and decision making. Eight dimensions of QWL are presented in Quality of Work Life Assessment (Bowditch and Buono, 1982); overall organization, compensation, job security, management policies, relations with supervisors, advancement, co-worker and interpersonal relations, and the job itself.

QWL Measurement

Quality of worklife assessment provides the means for identifying behavioral problems which are inhibiting performance (Terry and Dar-El, 1980). Likert (1967) proposed that the performance and output of an enterprise is entirely dependent upon the quality of the human organization. As with any evaluation an important first step is the definition of purpose. Marks (1982) distinguishes between proactive and

reactive measurement; the former is conducted prior to the existence of problems while the latter is done in response to a problem. Type of measurement will differ between organizations, and all have limitations. Interviewing is a costly process, mail surveys have a poor rate of return, and filling out surveys at work is time consuming. There are two basic forms of instruments utilized for quality of worklife assessment; internally generated (organization specific) or externally developed (generic). In the former it becomes necessary to evaluate on the basis of objectivity, quality of measurement, validity, reliability, and resource availability (Sinclair, 1975). There are multiple generic instruments available for quality of worklife measurement. The Job Description Index (JDI) (Smith, Kendall, and Hulin, 1969) measures pay, supervision, advancement, co-worker relationship, and work itself. The JDI is simplified in that it provides only three potential answers to each question. Analysis improves yet accuracy is not limited. The instrument is written with simple vocabulary and may be self-administered. The Job Diagnostic Survey (JDS) (Hackman and Oldham, 1975) was developed to evaluate current jobs to determine how they might be redesigned to increase output and motivation, and to evaluate the effects of these changes on employees. The Job Characteristics Inventory (JCI) (Sims, Szilagyi, and Keller, 1976) is composed of 30 items measuring autonomy, relationship with others, friendship, task identity, feedback, and variety.

QWL is dependent upon employee participation. In order to be successful, all members of the organization must have shared values (Hartenstein and Huddleston, 1984).

Attitudes Toward Aging and the Aged

Study of attitudes toward aging and the aged has been a consistent interest since Tuckman and Lorge (1953) initiated study over 30 years ago. There was concern by gerontologists that attitudes were an important influential feature of the sociocultural environment (Atchley, 1980). Findings showed that stereotypical conceptions about the elderly influenced reactions of individuals to the aged, as well as to political and social institutions designed to service the elderly (Butler, 1975; Brubaker and Powers, 1976). In the literature however, evidence for the existence of negative or stereotypic perceptions was equivocal at best (Green, 1981). There has been a lack of agreement about the theoretical status of attitude concept and also wide variations in the the form and content of instruments used to assess attitudes (Wingard, Heath, and Himmelstein, 1982).

Many methods were used by researchers to study attitudes toward the aged. Questionnaires (Kogan, 1961), sentence completion tests (Golde and Kogan, 1959), trait rating scales (Aaronson, 1966), semantic differentials (Eisdorfer and Altrocchi, 1961; Rosencranz and McNevin, 1969), and projective techniques (Cameron, 1969) were all utilized to determine perception of the elderly. From those studies certain characteristics about the elderly emerged. The elderly were viewed as conservative, set in their ways, possessing negative feelings toward young people, passive, inactive, weak, and dependent. There was a lack of personal acceptability of the elderly and an unwillingness to interact with them.

Many instruments were found to have limited usability. Among the problems faced were the susceptibility to psychometric problems,

reliance on generalized stereotypical information, and the point that the relation to actual behavior was not demonstrated. Many instruments measure knowledge, beliefs, preferences, or intentions, all similar to but not quite the same as attitudes. The attitude statement will reflect a positive or negative disposition toward the target; the others do not. Another factor creating differences in research results derived from "generalized" and "personalized" studies. The context in question, all elderly or a specific older person, evoked different responses influenced by respondent experiences and sentiments.

While sex appeared to correlate with attitude, there was no discernible pattern for the effect of sex differences. Males were found to be more positive in attitude (Keith, 1977; Weinberger and Millham, 1975) as often as females (Drevenstedt and Banziger, 1977; Holtzman, Beck, Hodgetts, Coggan, and Ryan, 1977). Socioeconomic status also showed differing relationships. Studies indicated a positive association between high socioeconomic status and attitude (Kilty and Feld, 1976) as well as a negative association (Eisdorfer, 1980), and also no consistent relationship (Naus, 1973). The level of education appeared to consistently associate with favorable evaluation of the elderly (Harris and Associates, 1975; Keith, 1977). Numerous studies of ethnic and cultural effects on attitudes were conducted, although researchers concluded that it was difficult to ascertain any significant relationship (Perry and Cowburn, 1980). While prior contact with the aged usually implied positive attitude, it was the quality of the contact which was most relevant, not the quantity.

Political Involvement

The importance of political interest was described as a necessary condition for the selection and direction of quality leaders who incorporate citizens' views into public policy (Ippolito and Walker, 1980). Researchers studying various nations stated that it was through participation that citizens communicate to leaders, forcing the leader to respond (Verba, Nie, and Kim, 1978). Rosenbaum (1978) declared that the primary purpose of participation in a democracy was to increase government responsiveness and accountability to those affected by public decisions. Since the explosion of social legislation during the Johnson Administration, nearly every phase of American life was affected by what Congress or the Executive Agencies decided upon. Minor changes in policies affected millions of people. Patti and Dear (1975) prescribed the need for individual and group involvement in the political arena due to the rippling effects of governmental decisions.

Although it is every citizen's right to become involved politically, the opportunity to do so varies among the populace. In a national study (Verba and Nie, 1972) researchers were able to classify American people into specific political categories. Inactive or non-participants comprised the largest group, 22 percent of the total sample. Voting specialists, or those who only vote, were the next largest group, comprising 21 percent of the total. Communalists, or those with high levels of community activity but low levels of political activity, made up 20 percent of the study. Campaigners, or those with low levels of community activity and high levels of political activity, made up 15 percent. Complete activists were those who participated in all activities at high levels, and comprised 11 percent of the total. A

total of seven percent was listed as unclassifiable. The smallest group, parochial participants, were those interested in political activities only when it related to their personal lives, and comprised four percent of the total.

Milbrath (1972), developed a classification system for identifying political behavior in this country. The largest group were spectators, who involved themselves in politics through voting, discussions, and other activities. This group contained about 60 percent of the population. At least one-third of the population was noted to be apathetic in regard to politics and associated activities. The third and smallest group, only 1 to 2 percent, were called gladiators, since they were intensely involved in the political arena as candidates, staff, and volunteers. As both studies indicated, despite the opportunity for involvement to all Americans, active political participants were in the minority.

There were numerous studies of factors in participation patterns. Studies indicated that better educated people had a stronger sense of duty to participate in politics and were more likely to consider issues in broader, abstract terms (McClosky, 1964; Almond and Verba, 1965; Bone and Ranney, 1976; Nie, Verba, and Petrocik, 1976). Wynia (1974) concluded that those with higher education were more in favor of government involvement.

Men were commonly thought of as more likely to participate, although in recent years significant increases by women engaging in political activities were seen (Boneparth, 1977). The nomination of a female Vice-Presidential candidate may signal the start of a new era in American politics. Age was a factor, with participation rising

gradually to a peak in the late 30's (Glenn and Grimes, 1968). The baby-boom generation, politically active at a young age, are now in their 30's. It should be interesting to watch this group and their political involvement over the next few decades. It was commonly assumed that the largest divergence in political opinion lies between those under 30 and those over 50 (Lenski, 1967).

Geographically, those in rural areas were less likely to be active since they were removed from the center of political activity. Those individuals residing in urban areas were able to interact with more groups and influence them, and be influenced by many others (Milbrath, 1965). Larger communities typically have higher participation rates in voting, and large cities were noted as liberal enclaves (Robinson, Rusk, and Head, 1975). The northern and eastern regions of the United States are considered liberal, while the southern and western regions tend to be classified as conservative.

Studies indicate a positive correlation between political participation and socioeconomic status (Prewitt and Verba, 1977; Zeigler and Tucker, 1978). Persons of higher socioeconomic and educational backgrounds are more likely to be politically aware, and are able to conceive a political philosophy based on their knowledge and understanding. This background usually leads to a positive attitude toward political participation. Another factor in participation is organizational membership. The explosion of Political Action Committees (PAC's) in the late 1970's has led to indirect involvement of many persons in the political process. Organizations can motivate their members to become more involved through monetary contributions and other activities. Those more involved in organizational activities are more likely to

participate in political issues. Individuals in groups may exhibit similar behavior due to shared interests and common concerns (Mahood, 1967).

Summary

The Elderly Nutrition Program for Older Americans is an integral element of the Older Americans Act. A highly visible program, it has grown from 30 research and demonstration projects to well over 13,000 meal sites. The Program provides nutritional sustenance to many older adults as well as affording them social contacts and other services. Past studies of the Elderly Nutrition Program have indicated that management practices could be improved.

Performance measures such as effectiveness, productivity, quality, quality of worklife, and innovation can be used to indicate management practices. Past research at Oklahoma State University has focused on groups of dietitians and their utilization of performance measures. The current study examines performance measures of both dietitians and foodservice managers who are employed in the Elderly Nutrition Program.

The use of sociopolitical variables, such as attitudes toward aging, and political activity, can provide supporting data for behavior and performance of managerial personnel. This study, interdisciplinary in focus, is a synthesis of food systems administration principles and sociopolitical variables within a public policy framework. Utilizing a regional sample of Elderly Nutrition Program meal sites, the current study focuses on management practices which lead to successful organizational performance.

CHAPTER III

METHODOLOGY

This chapter provides a description of the study design, the population to be studied, the instrument development process, data collection procedures, and data analysis procedures. This research was conducted to investigate the relationship between selected management performance measures and selected sociopolitical variables associated with management personnel within the Elderly Nutrition Program. The study is concerned with information, conditions, and differences that exist. A descriptive status survey was the research design used in this study (Kerlinger, 1973; Van Dalen, 1973). Descriptive research is concerned with hypothesis formulation and testing, analysis of relationships between non-manipulated variables in a natural setting and the development of generalizations, principles or theories through the use of inductive-deductive reasoning (Best, 1981).

Population and Sample

The population for this study consisted of all meal site managers and dietitians of local nutrition service provider agencies in Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas) of the Federal Administration on Aging Nutrition Program for Older Americans. A random sample (n=350) of meal site managers was selected from the total (n=1440) population. A census (n=40) of the dietitians was conducted

due to the limited number of dietitians contacted within Region VI. A complete listing of the population to be studied was requested from the Region VI Director in Dallas, Texas. Based on the suggestion of the Region Administration, each State Agency within the Region was contacted for the necessary information.

The population consisted of two groups--the meal site managers and the dietitians at the local level of nutrition service. The meal site managers can be considered to be a homogenous group in that they share a similar mission--that of administration under contract with the Area Agency on Aging. The dietitians can also be considered a homogeneous group in that they also share a similar mission under contract with the Area Agency on Aging. The two groups are related by a contract basis and similarity of function across programs.

Instrumentation

A research instrument entitled "Elderly Nutrition Program Performance Measures Study" was developed. The use of a survey questionnaire facilitated the collection of data from the sample which is spread over a wide geographical area. The five-part questionnaire was designed to collect data from the two groups--meal site managers and dietitians. Part I contained statements designed to ascertain individual attitudes toward aging and the aged. Part II contained statements designed to ascertain individual involvement in selected political activities. Part III contained statements designed to ascertain performance measures in the Program. Part IV contains statements designed to obtain background information about each nutrition program. Part V contained statements designed to obtain background information about each respondent.

Part I of the questionnaire, Attitudes Toward Aging consists of a seven-item semantic differential developed by Guptill (1969). This instrument has been used in other studies at Oklahoma State University which investigated attitudes toward aging (Chang, 1977). This instrument was not copyrighted, therefore permission to use it was based solely on recommendations from gerontologists at Oklahoma State University. The scale was designed in the form of bipolar rating scales with seven possible differentiations that show the direction and intensity of meaning. In the present study, respondents were asked to circle the number for each statement that would most nearly represent their attitude toward old people in general.

Part II of the questionnaire, Political Activities, was based on a checklist used by Cummings (1982) in her study "Home Economists and Political Participation." Permission to adapt this instrument was requested of the original researcher, and upon receiving permission the investigator adapted statements to meet the needs of the current study. Cummings' instrument consisted of thirty general statements concerning political participation. The investigator combined similar concepts and eliminated those not relevant to the present study. The researcher decided to include statements found to be significant in Cummings' study. Through the use of these two steps, the original thirty statements were reduced to fifteen. The investigator, with recommendations from the committee, further reduced the number to seven, all rewritten specifically for the current study. The original study measured each statement on a five point scale ranging from unimportant to important. The current study also utilized a five point scale, however the descriptors were changed to reflect the needs of the study. The range of

descriptors used includes: "at all times," "frequently," "sometimes," "rarely," and "never." Respondents were requested to circle the frequency with which they performed the activity.

Part III of the instrument, Performance Measures, consists of 30 statements pertaining to specific activities within foodservice operations which characterize ideal management activity. Performance measures have been studied previously at Oklahoma State University (Shaw, 1983; Pickerel, 1984; Lamb, 1984; Taylor, 1984; and Leche, 1984). The statements utilized for the current study are taken from five identified performance measures; productivity, effectiveness, quality, quality of work life, and innovation. There are eight productivity statements, twelve effectiveness statements, five quality statements, three quality of work life statements, and two innovation statements. Previous research questionnaires were examined and certain statements were selected for this study based on applicability and committee suggestion. A number of statements were written by the researcher specifically for the current study. These statements were based on the investigator's knowledge of the Elderly Nutrition Program. Measurement was determined in two ways; first, respondents were requested to identify which management person performed the activity--foodservice manager, dietitian, both, or no one; and then respondents were asked to circle the frequency with which the activity was performed. Frequency was measured on a five point scale ranging from always to never.

Part IV of the questionnaire, Program Characteristics, consisted of 12 statements designed to assess the level and type of activities at each meal site. Information provided included site location, other service available at site, type of foodservice system, method of meal

preparation, days of service, meal service method, number of daily meals, number of full-time and part-time employees, and average daily financial contribution. Part V of the questionnaire, Personal Data, was designed to obtain demographic data including gender, age, employment history, salary, political party affiliation, marital status, and education level.

The instrument went through several revisions before completion (see Appendix C for evolution of instrument). Early drafts were reviewed by the investigator, committee members, and Administration on Aging officials. The experts were chosen from the areas of home economics, sociology, food systems management, political science, and statistics. Suggestions from the experts were used in further revision of the instrument with the established goal of content validity. The pilot study research instrument was examined for content validity, clarity, and format by a panel composed of graduate faculty members from food systems administration, gerontology, home economics, political science, and statistics. The pilot study instrument was off-set printed on ivory linen paper. An introductory letter from the investigator and dissertation advisor was enclosed with the questionnaire to explain the purpose of the study. In addition, each State agency notified sites as to the importance of the study and requested cooperation for its completion. The instrument was designed so that it could easily be refolded, stapled, and mailed back to the researcher. Return postage was provided by the investigator. A random sample of the study population was chosen for the pilot study (n=50). Participants in the pilot study were not included in the survey sample. The pilot study generated a return of 24 percent. Respondents were asked to comment on the clarity of questions

and ease of response. Final revisions of the questionnaire reflected the advice of committee members, Administration on Aging officials, faculty experts, and pilot study participants.

Collection of Data

The investigator contacted the Director of Region VI of the Federal Administration on Aging, and the Directors of State Units on Aging of the states in Region VI prior to the start of the study. The purpose of this contact was to inform them of the study, solicit their advice on the study, and enlist their support in the promotion of cooperation with the study.

A cover letter and survey instrument was mailed to each meal site manager included in the randomly selected sample (n=350). Initial plans included dietitians in the random sample, however, the number of dietitians working in the program within Region VI was considered too small for inclusion in the random sample. It was decided to conduct a census of dietitians within Region VI (n=40). Each dietitian received a survey and a cover letter. A two-week response date was requested of respondents in order to allow sufficient time to complete the survey, but not too much time to set it aside. A follow-up reminder was sent to non-respondents immediately following the stated response date. Approximately one month from the initial mailing, a random sample of non-respondents was selected for a telephone survey in order to ascertain their responses to selected questions from the survey instrument.

Analysis of Data

Data collected from the responses to the questionnaire was coded, entered into the computer, and analyzed by means of the Statistical Analysis System (SAS) software package at the Oklahoma State University Computer Center. Appropriate statistical tests were selected for each of the hypotheses, with an α of 0.05 assigned as the significance level for each test.

Responses to portions of the questionnaire were summarized and reported as frequencies and percentages. Inferential statistics were selected to assist the investigator in the analysis of the research hypotheses.

The first null hypothesis (H_1) formulated for this study stated that there would be no significant difference between the level and type of program activity of the elderly nutrition service and management performance measures. Program activity served as the independent variable, while management performance measures served as the dependent variable. The level and type of activity were determined through frequency scores obtained from Part IV of the questionnaire. Management performance measures were determined from responses to the statements in Part III of the questionnaire. Performance measures were delineated into separate categories of productivity, effectiveness, quality, quality of work life, and innovation. Frequency responses were calculated as to who performed this activity, while frequency of performance scores were summed to derive a total performance measure score. Contingency table analysis using chi-square tests were utilized in this section.

The second null hypothesis (H_2) for this study stated that there would be no significant difference between the management performance

measures and selected demographic characteristics of the respondents. The demographic characteristics served as the independent variables, with management performance measures as the dependent variable. The demographic characteristics were determined through frequency scores obtained from Part V of the questionnaire. The origin of management performance measures has been explained in the preceding paragraph. The statistical measure employed was contingency table analysis using chi-square tests.

The third hypothesis (H_3) for this study stated that there would be no significant difference between level and type of program activity of the elderly nutrition service and nutrition service providers' attitudes toward aging and the aged. Program activity was the independent variable, while attitudes toward aging and the aged served as the dependent variable. The level and type of program activity was determined through frequency scores obtained from Part IV of the questionnaire. The respondents' attitudes toward aging and the aged were determined from responses to statements in Part I of the questionnaire. Responses in Part I were summed to obtain an overall attitude score. Analysis of variance with an F-test was the statistical measure utilized in this section.

The fourth hypothesis (H_4) proposed for this study stated that there would be no significant difference between nutrition service provider' attitudes toward aging and the aged and selected demographic characteristics of the respondents. The demographic characteristics served as the independent variables while the attitude measures served as the dependent variable. The description of scoring demographic characteristics has been previously stated. The respondents' attitudes

toward aging and the aged were determined from responses to statements in Part I of the questionnaire. The statistical method used was an analysis of variance with an F-test.

The fifth hypothesis (H₅) proposed for this study stated that there would be no significant difference between level and type of program activity of the elderly nutrition service and nutrition service providers' selected political activities. Program activity was the independent variable, while selected political activities served as the dependent variable. Program activity was determined through use of frequency scores obtained from Part IV of the questionnaire. Nutrition service providers' selected political activities were determined from responses to statements in Part II of the questionnaire. Responses to statements in this Part were summed to determine an overall political activity score. Analysis of variance with an F-test was selected as the statistical measure in this section.

The sixth hypothesis (H₆) of this study stated that there would be no significant difference between nutrition service providers' selected political activities and selected demographic characteristics of the respondents. The demographic characteristics were the independent variables and the selected political activities served as the dependent variable. The respondents' selected political activities were determined from responses to statements in Part II of the questionnaire. Demographic characteristics were obtained from Part V of the instrument. The statistical method employed was an analysis of variance with use of an F test.

The seventh hypothesis (H₇) of this study stated that there would be no significant difference between respondent's attitudes toward aging

and the aged as associated with management performance measures. The attitude measures served as the independent variable while the management performance measures were the dependent variable. Contingency table analysis was utilized in this section.

The eighth hypothesis (H₈) postulated for this study stated that there would be no significant difference between respondents' selected political activities as associated with management performance measures. The selected political activities served as the independent variable while the management performance measures were the dependent variable. Contingency table analysis was the statistical method chosen for this section.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose in this study was to investigate the relationship of selected sociopolitical factors and selected management performance measures among nutrition service management personnel in the Older Americans Act Nutrition Program for Older Americans. Data were obtained using the research instrument described in Chapter III, "Elderly Nutrition Program Performance Measures Study." The questionnaires were mailed to 350 randomly selected meal site managers from Region VI, and to 40 dietitians, representing a census of dietitians from Arkansas, Oklahoma, and Texas, employed by the Elderly Nutrition Program in Region VI. The researcher was unable to obtain addresses for dietitians employed with the Elderly Nutrition Program in Louisiana, and there are no dietitians working with the program in New Mexico. Total response from meal site managers was 42 percent (N=139), while total response from dietitians was 40 percent (N=16). There were twenty survey instruments returned as nondeliverable, and two instruments, both from meal site managers, returned with only one section completed, so were not included in the analysis. A total of 153 survey instruments were used in the final analysis. Individual state response rates may be seen in Tables I and II.

TABLE I
MEAL SITE MANAGERS RESPONSE RATE BY STATE

State	Surveyed	Not Deliverable	Returned	Percentage
Arkansas	53	3	36	72
Louisiana	77	6	31	44
New Mexico	10	-	2	20
Oklahoma	30	-	15	50
Texas	180	11	55	32
TOTAL	350	20	139	42

TABLE II
DIETITIANS RESPONSE RATE BY STATE

State	Surveyed	Not Deliverable	Returned	Percentage
Arkansas	7	-	2	29
Oklahoma	21	-	11	52
Texas	12	1	3	27
TOTAL	40	1	16	41

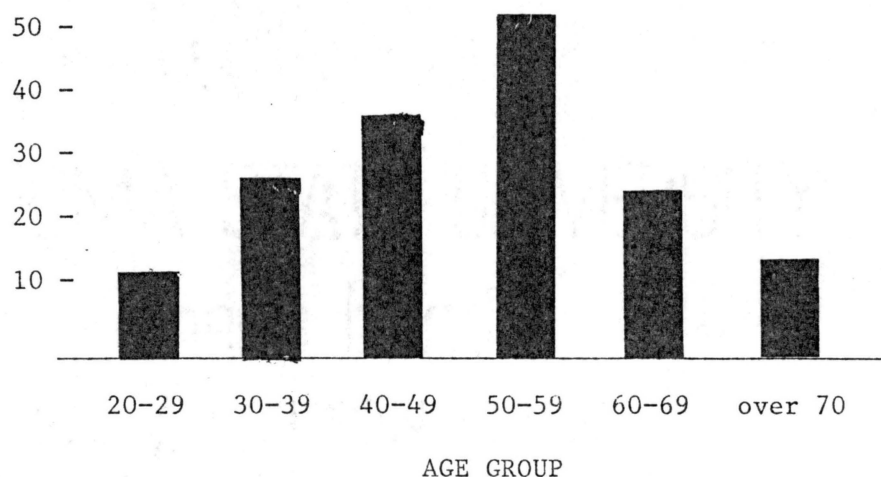
Characteristics of Study Participants

Age

Thirty-two percent (n=49) of the respondents were in the 50 to 59 years of age group, 21.6 percent (n=33), were in the 40 to 49 years of age group, 16.3 percent (n=25) were in the 30 to 39 years of age group, 15 percent (n=23) were in the 60 to 69 years of age group, 7.9 percent (n=12) were over 70 years of age, and 7.2 percent (n=11) were in the 20 to 29 years of age group. Figure 1 illustrates the age distribution of respondents, which indicates that over half were older than fifty. This distribution suggests a uniqueness among foodservice operations.

FIGURE 1

SURVEY RESPONDENTS BY AGE GROUP



Marital Status

The majority, 68.6 percent (n=105), of survey respondents were married. Only two percent (n=3) had never been married, while 29.4 percent (n=45) were widowed, divorced, or separated. Approximately a quarter of the latter group indicated widowhood on the survey instrument. This unsolicited response suggests that the categories of widowed, and divorced and separated, be listed separately.

Race and Sex

A large majority of the respondents, 84.4 percent (n=129) were Caucasian. Blacks represented 8.5 percent (n=13) of the respondents, and Hispanics totaled 6.6 percent (n=10). One respondent indicated an ethnic heritage of American Indian. A large proportion of the respondents were female (n=141), totaling 92.2 percent, while males made up 7.8 percent of respondents (n=12).

Education

One-third of the respondents, 33.8 percent (n=51), indicated some completed college background. Another large group, 31.1 percent (n=47), noted they were high school graduates. Respondents indicating they had some high school education were 11.3 percent (n=17), while 6.6 percent (n=10) had obtained a bachelor's degree. Some graduate study had been completed by 9.3 percent (n=14), with 7.3 percent (n=11) earning masters degrees and one respondent, a doctoral degree. The meal site managers in general had not obtained college degrees, although some had attended college. All dietitians had at least a bachelor's degree. Younger respondents had higher levels of education than the older respondents.

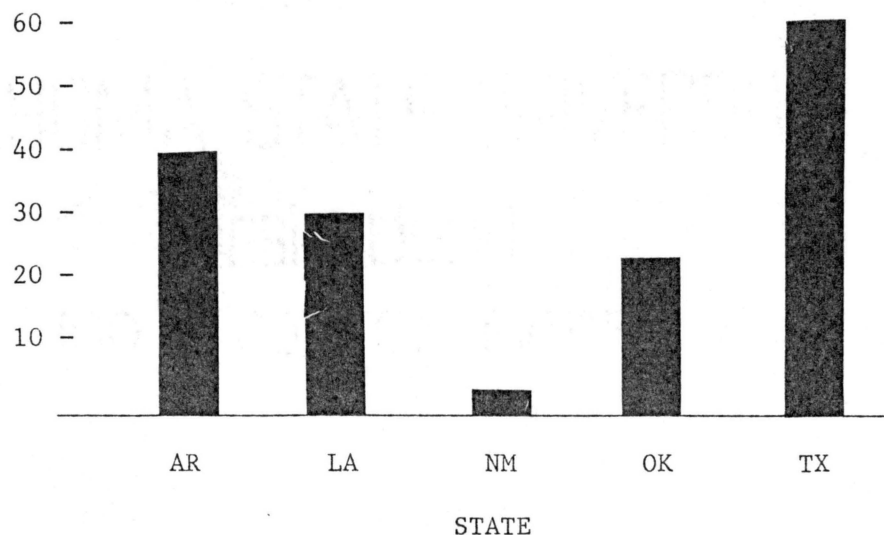
Not all respondents who had earned a college degree indicated their major field of study. Of the respondents who did indicate a major field of study, the majority indicated dietetics or home economics as majors. Other disciplines represented included business, nursing, education, sociology, psychology, and public health.

State of Residence

Texas, the largest state in region VI, had the largest response rate, 37.4 percent (n=58). Arkansas represented 24.5 percent (n=38) of the respondents. Twenty percent (n=31) of the respondents were from Louisiana, while 16.8 percent (n=26) were from Oklahoma. Only two respondents were from New Mexico, representing 1.3 percent of all responses. Figure 2 illustrates the distribution of responses by state of residence.

FIGURE 2

SURVEY RESPONDENTS BY STATE OF RESIDENCE



Political Party Affiliation

Sixty-eight percent (n=104) of the respondents indicated they were members of the Democratic Party. Independents totaled 11.1 percent (n=17), while Republicans totaled 10.45 percent (n=16). The "other" category was checked by 10.45 percent (n=16). Most respondents checking the "other" column indicated that they voted for the person, not the party. Some respondents indicated that they voted, but their political preference was a matter of personal choice. Only a few respondents noted no affiliation at all.

Registered Dietitian Status

The majority of survey respondents, 87.6 percent (n=134), were meal site managers, and those individuals were generally not dietitians. Of those respondents indicating status as a dietitian, 8.5 percent (n=13) were both registered and licensed, while 3.9 percent (n=6) were registered only. The number of dietitians indicated by their response (n=19) is greater than the return of survey instruments by dietitians (n=16). Three respondents from the meal site managers group indicated R. D. status. Within Region VI only Oklahoma and Texas have mandated licensure of dietitians.

Route to Registration

The primary route to dietetic registration for dietitian respondents was the internship route, as indicated by 79 percent (n=15). Three respondents, 15.8 percent, became qualified through a graduate degree plus an approved work experience. One respondent was a graduate of a coordinated undergraduate program (CUP).

Position Title

Sixty-four percent of the respondents noted that their title was meal site manager. Some respondents checking this category wrote that the actual title was congregate meal manager, nutrition program manager, or foodservice director. One quarter of the respondents, (n=39), checked the "other" category. Nearly all who checked this group indicated their title was site or project director. Respondents with the title of dietitian total 10.5 percent (n=16).

Time in Current Position

The majority of respondents had been working in the Elderly Nutrition Program for more than two years. The largest group, 30.8 percent (n=47), had worked from 6 to 10 years. Over one fourth of the respondents, 26.1 percent (n=40), had been working with the Program from 3 to 5 years. The third largest group, comprising 22.2 percent (n=34), had worked at the current position for 1 to 2 years. Seventeen respondents, 11.1 percent, had worked with the Elderly Nutrition Program for more than 10 years. Fifteen respondents, 9.8 percent, had worked in the Program for less than 1 year.

Previous Employment in the Elderly Nutrition Program

The majority of the respondents, 82.4 percent (N=126), had not worked in the Elderly Nutrition Program prior to their current position. A group of twenty-seven respondents, 17.6 percent, had worked in another position associated with the Elderly Nutrition Program. Nearly half of these individuals indicated that they had been a general helper or worker in the previous assignment. A third had been either outreach or

social workers. Two respondents had been the home delivered meals coordinator, and two indicated that they had been in charge of transportation services for the Program.

Years of Previous Employment

The average number of years of previous employment in the Program was 5 years. Thirty-seven percent (n=10) had previously worked for 1 to 2 years, 29.6 percent (n=8) had worked 6 to 10 years, 26 percent (n=7) had worked 3 to 5 years, and two respondents, 7.4 percent, had previously worked in the Program for more than 10 years.

Employment Status

Nearly half of the respondents, 48.3 percent (n=72), were employed full time, defined as at least 35 hours each week. Respondents who worked at least 20 hours but less than 35 hours each week totaled 38.3 percent (n=57), while 13.4 percent (n=20) worked less than 20 hours each week. Dietitians all worked less than 20 hours each week, with the Elderly Nutrition Program. In general, meal site managers work at least 20 hours each week.

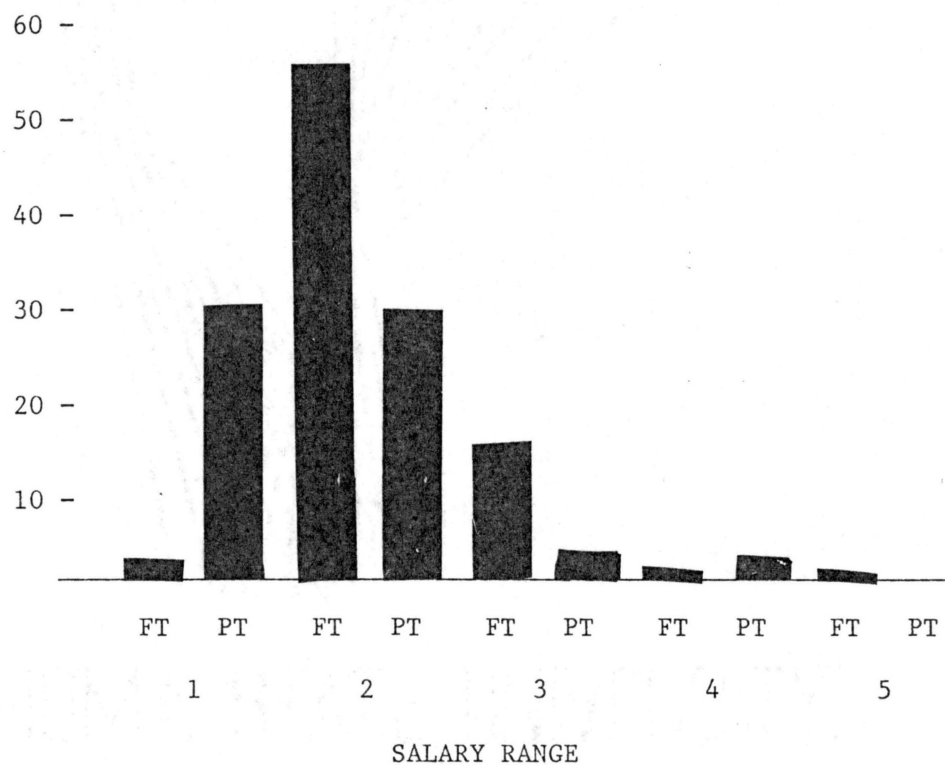
Salary

The respondents were split almost evenly between part time, 46.5 percent (n=66), and full time, 53.5 percent (n=76). The largest group, 60.5 percent (n=86), reported a salary between \$5,000 and \$14,999, while 23.2 percent (n=33) indicated a salary under \$5,000. Two percent of those responding (n=3) made from \$25,000 to \$34,999, and 13.4 percent (n=19) reported salary income between \$15,000 and \$24,999. One

respondent indicated a salary above \$35,000. Figure 3 illustrates the salary distribution of part time and full time respondents. Respondents indicating a salary in excess of \$25,000 were county coordinators, responsible for multiple sites.

FIGURE 3

SALARY DISTRIBUTION OF FULL TIME AND PART TIME RESPONDENTS



Key: 1 - less than \$5,000
 2 - \$5,000-\$14,999
 3 - \$15,000-\$24,999
 4 - \$25,000-\$34,999
 5 - over \$35,000

Benefits Provided

Every benefit listed on the survey instrument was represented in the responses. The most common benefits provided were paid vacation, paid holidays, and paid sick leave. These three benefits were reported by approximately 75 percent of the respondents. Benefits received by more than one third of the respondents included a medical plan, group life insurance, and meals. A complete list of benefits provided, their frequency, and percentage received can be seen in Table III.

Professional Organizational Membership

In general, respondents were not members of a professional organization. All but one of the dietitians responding belonged to the American Dietetic Association (ADA). Dietitians were not likely to belong to any other group except for a practice group within ADA. The largest group responding, (n=24) checked the "other" category. Of this group, nine did not indicate organization membership, while eight indicated membership in the National Association of Nutrition and Aging Service Programs (NANASP). A complete listing of organizations and membership frequency are included in Table IV.

Characteristics of the Meal Sites

Size of the Community

Most respondents indicated meal sites were located in a small city, 39.2 percent (n=60), or in a rural area, 36 percent (n=55). Only one fourth of sites represented in the survey were in medium-sized cities, 13.7 percent (n=21), or large cities, 11.1 percent (n=17). Figure 4

illustrates the distribution of community size. The 1983 national study (Kirchner Associates, 1983) reported more urban and medium-sized cities.

TABLE III
BENEFITS PROVIDED

Benefit	Frequency	Percentage*
Paid Vacation	114	74.5
Paid Holidays	113	73.9
Paid Sick Leave	111	72.5
Medical Plan	61	39.9
Group Life Insurance	58	37.9
Meals	52	34.0
Accidental Death and Dismemberment Insurance	43	28.1
Pension Plan	34	22.2
Dental Plan	24	15.7
Paid Maternity Leave	12	7.8
Education Assistance	11	7.2
Uniform	10	6.5
Travel Reimbursement ^a	5	3.3
Credit Union ^a	1	0.06

^a

Listed from "other" category

* Percentage based on N=153 and not totaled to 100 percent (multiple responses possible)

TABLE IV
PROFESSIONAL ORGANIZATION MEMBERSHIP

Organization	Frequency*
American Dietetic Association	18
Society for Nutrition Education	12
National Association of Nutrition and Aging Service Programs	8
American Home Economics Association	4
Dietary Managers Association	3
National Association of Meal Programs	3
National Council of Older American	1
National Association of Senior Centers	1
American School Food Service Association	1
Institute of Food Technologists	1

* Multiple memberships possible

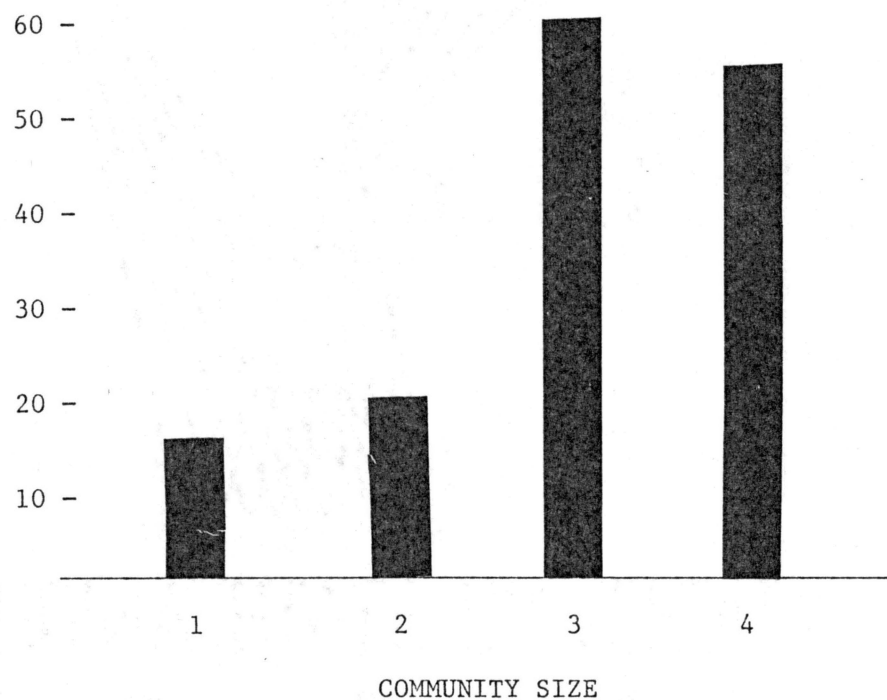
Type of Facility

Nearly half of all sites were located in a community center, 47.1 percent (n=72). This figure compares with 39 percent reported in the last national study. Due to the variety of facilities where meal sites were located, the "other" category was checked by 37.1 percent (n=57) of the respondents. This figure was much lower (nine percent) in the 1983 national study. Nearly half of the sites from the "other" category were located in a senior citizen center, 18.3 percent (n=28). A complete

listing of facility types can be found in Table V, along with their frequency of occurrence and percentage of total. There were less sites located in churches, apartment complexes, and storefronts, in the current study while more sites were located in schools than in the national study (Kirchner Associates, 1983).

FIGURE 4

SIZE OF COMMUNITY OF MEAL SITE LOCATION



Key: 1 - Large City (> 150,000 people)
2 - Medium City (25,000-150,000 people)
3 - Small City (2,500-24,999 people)
4 - Rural Area (< 2,500 people)

TABLE V
TYPE OF FACILITY OF MEAL SITE

Facility	Frequency	Percentage
Community Center	72	47.1
Senior Citizen Center	28	18.3
School	9	5.9
Church	7	4.6
City Building	5	3.3
American Legion Hall	4	2.6
Apartment Complex	4	2.6
Office Building	3	2.0
County House	3	2.0
Storefront	2	1.3
Recreation Center	2	1.3
Union Hall	1	0.6
Scout Center	1	0.6
Nursing Home	1	0.6
No Facility Indicated	11	7.2
TOTAL	153	100

Services

Similar to benefits provided to survey respondents, a large variety of services were available at each meal site in addition to the

nutrition program. The most common of these services included recreation, information and referral, outreach services, shopping assistance, and escort services. These were available at more than two-thirds of the meal sites. In addition to the services listed on the survey instrument, respondents checking the "other" category added numerous others. For a complete listing of services available at meal sites, their frequencies, and percentages, see Table VI.

Transportation

A large majority of meal sites, 89.6 percent (n=137), offered transportation services to participants in the Elderly Nutrition Program. A small group, 10.4 percent (n=16), did not provide transportation services. Transportation had been noted as a service most closely associated with participation (Kirchner Associates, 1979). For this reason, it was listed separately from the other services.

Food Service System

Eighty-one percent of responding sites (n=124) prepared food on the premises, with only nineteen percent (n=29) serving food which was prepared elsewhere. Sixty-four percent (n=98) of all sites had food prepared by site personnel, while 16.3 percent (n=25) had food prepared by a contract caterer. These figures compare with 56 percent and 44 percent respectively, reported in the national study (Kirchner Associates, 1983). Approximately twelve percent (n=18) of all sites utilized a caterer and site personnel to prepare meals, and eight percent (n=12) have the food prepared by another government sponsored program, such as

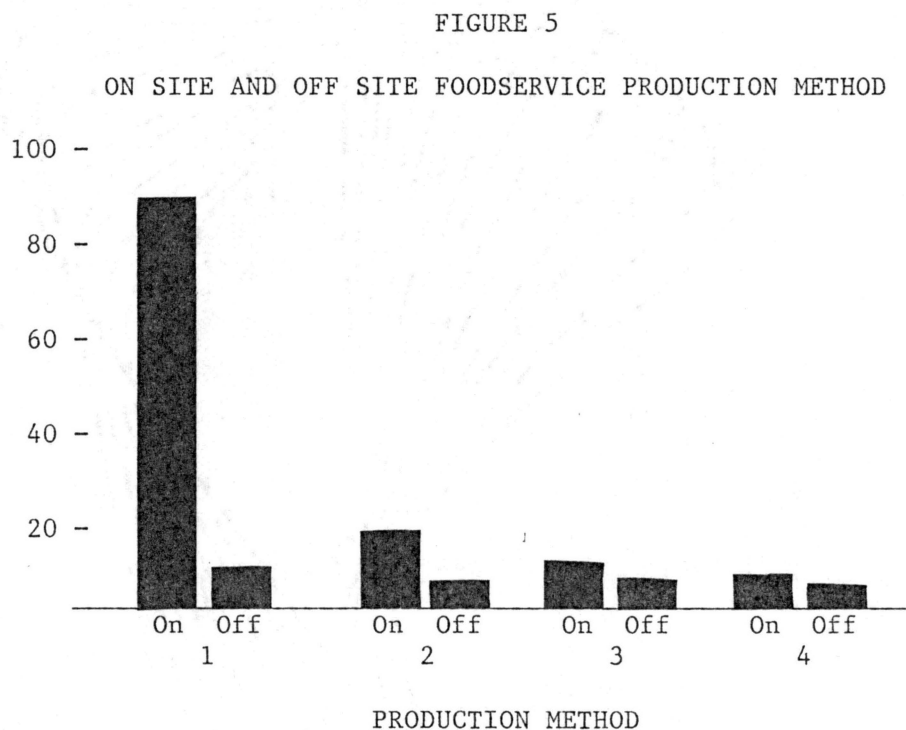
TABLE VI
SERVICES AVAILABLE AT MEAL SITE

Service	Frequency	Percentage*
Recreation	139	90.9
Information and Referral	138	90.2
Outreach Services	133	86.9
Shopping Assistance	110	71.9
Escort Services	102	66.7
Counseling	90	58.8
Financial Services	46	30.1
Health Screening ^a	18	11.8
Education ^a	9	5.9
Arts and Crafts ^a	6	3.9
Exercise Class ^a	5	3.2
Telephone Reassurance ^a	4	2.6
Adult Day Care ^a	3	2.0
Legal Services ^a	2	1.3
Religious Services ^a	1	.06
Emergency Response Systems ^a	1	.06
Nursing ^a	1	.06
Social Security Advise ^a	1	.06
Commodity Distribution ^a	1	.06
Frozen Weekend Meals ^a	1	.06
Volunteer Center ^a	1	.06

^a Listed under "other" category

* Based on N=153 and does not total 100 percent (multiple responses possible)

the National School Lunch Program. For a breakdown of on-site, off-site production methods, see Figure 5.



Key: 1 - By Site Staff
 2 - By Contract Caterer
 3 - By Staff and Caterer Together
 4 - By Another Government Program

Meal Service Method

Approximately two-thirds of the sites represented by respondents, (n=100), utilized a cafeteria-style of service. This figure was identical to that reported in the last national study (Kirchner Associates, 1983). Respondents who checked the combination-style category, 11.1

percent (n=17), indicated that their service style was primarily cafeteria-style service, with those unable to stand or wait in line waited on by volunteers or staff. Restaurant-style service was marked by 13.2 percent (n=20) of the respondents, while 6.6 percent (n=10) noted buffet style and 3.3 percent (n=5) indicated family-style service. These latter three figures were higher than those reported in the 1983 national study. The figure reported for restaurant-style of service was only 50 percent of the number reported in the national study.

Days of Service Each Week

Nearly all respondents, 94.8 percent (n=145), indicated that their meal site served five days each week. Six sites, 3.9 percent, served 3 days a week while one site served less than 3 days a week while another served seven days each week. These figures were approximately the same as those reported in the national study (Kirchner Associates, 1983).

Time of Day Meal Served

All sites responding served a noon meal which was called lunch or dinner. Five sites, 3.3 percent, served an additional breakfast meal each day, while two sites reported an evening meal was served.

Number of Meals Served

The average number of meals served at a site location was 120, with a minimum of 12 and maximum of 600 meals. Approximately one-third of those responding, 32.6 percent (n=46), indicated that they served less than 50 meals daily. Thirty-seven percent (n=52) of the respondents noted that they served between 51 and 100 meals daily (Table VII). Some

respondents did not report the number of meals served. The figure reported in the current study was double that reported in the national study (Kirchner Associates, 1983). Seventy percent, however, of the current study reported less than 100 meals served daily.

TABLE VII
NUMBER OF MEALS SERVED

Meals Served	Frequency	Percentage
12 - 50	46	32.6
51 - 100	52	37.0
101 - 150	15	10.6
151 - 250	10	7.1
251 - 600	18	12.7
TOTAL	141	100

Financial Contribution

The average daily financial contribution by participants was \$0.50. The contribution range was \$.06 to \$1.52. Table VIII lists the average contributions, frequencies and percentages. Several sites failed to report the financial contribution. The majority of meal

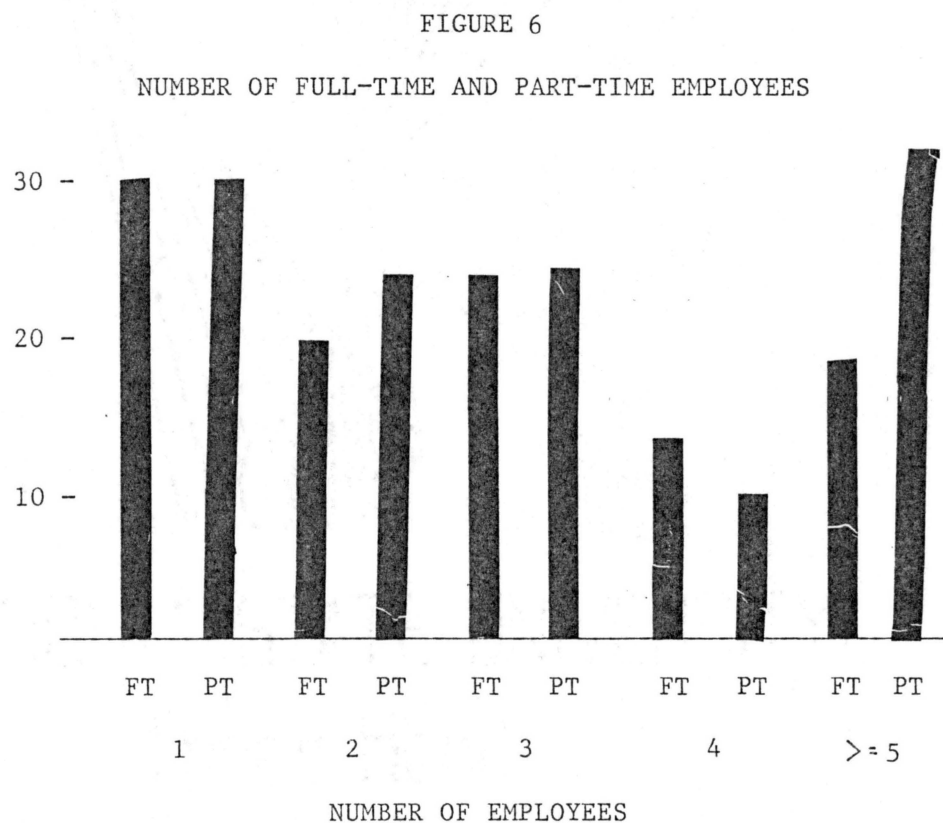
sites, 71.2 percent (n=94), noted that their average daily contribution per participant was \$.50 or less. A study by Phoenix Systems (Older American Reports, 1985) suggests that contributions to the program average between \$.75 and \$1.50. This telephone survey, sponsored by the Administration on Aging, was an attempt by the Reagan Administration to create subtle pressure on program participants. The Administration suggests that increased levels of contributions will lead to an increase in number of meals served. Data from the current study suggests more investigation of this topic.

TABLE VIII
AVERAGE FINANCIAL CONTRIBUTION OF PARTICIPANTS

Contribution	Frequency	Percentage
\$.06 - \$.25	43	32.6
.26 - .50	51	38.6
.51 - .75	17	12.9
.76 - 1.00	11	8.3
1.01 - 1.52	10	7.6
TOTAL	132	100

Full-Time Employees

Seventy percent (n=73) of all meal sites responding had three full-time employees or less. Sites which employ from four to seven full-time workers totaled 23.3 percent, while only 6 sites reported more than 8 full-time employees. Figure 6 illustrates the number of full-time and part-time employees.



Part Time Employees

The average number of part-time employees at each meal site was four, the minimum being one and the maximum noted in this survey was 32. Approximately a quarter of the sites responding (n=30) had one part-time employee. Less than twenty percent (n=23) had six or more part-time workers. Figure 9 displays the frequencies of part-time employees.

Volunteers

The average number of volunteers at sites in the current survey was eight, with the minimum being one and the maximum of 80. Sites with five or less volunteers totaled 41.7 percent, while sites with 6 to 10 volunteers totaled 39.4 percent. Less than twenty percent of sites reporting had more than 10 volunteers (Table IX).

Performance Measures

Performance measures were grouped into five separate categories; effectiveness, productivity, quality, quality of worklife (QWL), and innovation. Thirty performance activities were delineated within the five performance groupings. Table X contains the frequency of response and percent of performance of these activities by dietitians and meal site managers in the Elderly Nutrition Program of Region VI. The frequency of each performance measure is reported in Table XI.

Effectiveness

Only two activities were performed by the dietitian alone 25 percent or more of the time. The first activity was to conduct classes for participants on nutrition education. The second was to involve

TABLE IX
NUMBER OF VOLUNTEERS

Volunteers	Frequency	Percentage
1	9	6.8
2	19	14.4
3	8	6.1
4	6	4.5
5	13	9.8
6	16	12.1
7	6	4.5
8	10	7.6
9	2	1.5
under 10	18	13.6
over 10	25	18.9
TOTAL	132	100

participants in menu planning. A similar percentage of only foodservice managers also responded to the second activity. Over 40 percent of classes on nutrition education are conducted solely by the foodservice managers and 30 percent by the dietitian. Nearly 70 percent of the foodservice personnel reporting perform this activity always or usually within the operation. While 70 percent frequency appears high, nutrition education should be performed 100 percent of the time as it was mandated by Congress when the Elderly Nutrition Program was established.

TABLE X
PERFORMANCE MEASURES CONDUCTED BY DIETITIANS AND FOODSERVICE MANAGERS

Activities	N*	D ONLY		FSM ONLY		BOTH D AND FSM		NEITHER D OR FSM	
		f	%	f	%	f	%	f	%

EFFECTIVENESS										
(1) Conduct classes for participants on nutrition education	153	46	30.1	65	42.5	27	17.6	15	9.8	
(2) Follow-up on program dropouts	143	10	7	103	72	10	7	20	14	
(3) Check plate waste	153	14	9.2	104	68	24	15.7	11	7.1	
(4) Obtain participant evaluation of foodservice	155	16	10.3	93	60.3	35	22.6	11	7.1	
(5) Involve participants in menu planning	153	44	28.8	45	29.4	24	15.7	40	26.1	
(6) Provide choice in meal items	153	28	18.3	48	31.4	19	12.4	58	37.9	
(7) Home-delivered meals prepared for participants unable to attend meal site	152	9	5.9	118	77.7	16	10.5	9	5.9	
(8) Special meals (health related and/or religious-ethnic) offered to participants	151	29	19.2	44	29.1	21	13.9	57	37.8	
(9) Plan special events on featured days	153	8	5.2	111	72.5	28	18.3	6	4	
(10) Compare actual foodservice performance to forecasted performances	153	17	11.1	61	39.9	22	14.4	53	34.6	

TABLE X (Continued)

Activities	N*	D ONLY		FSM ONLY		BOTH D AND FSM		NEITHER D OR FSM	
		f	%	f	%	f	%	f	%
(11) Use production schedule	153	12	7.8	67	43.8	17	11.1	57	37.3
(12) Maintain system for utilization of leftovers	153	6	3.9	84	54.9	24	15.7	39	25.5
<u>PRODUCTIVITY</u>									
(1) Daily attendance record maintained	155	2	1.3	134	86.5	9	5.8	10	6.4
(2) Plan menus using standardized recipes	153	76	49.7	47	30.7	8	5.2	22	14.4
(3) Evaluate labor costs	150	23	15.3	63	42	22	14.7	42	28
(4) Meal production planned according to daily participation	153	21	13.7	106	69.3	16	10.5	10	6.5
(5) Monitor turnover, absenteeism, and tardiness of employees	155	8	5.2	104	67.1	13	8.4	30	19.3
(6) Review and revise job descriptions annually	155	13	8.4	85	54.8	17	1.3	40	25.8
(7) Comparison shop for food and supplies	152	21	13.8	77	50.7	21	13.8	33	21.7
(8) Conduct physical inventory of storeroom	153	8	5.3	109	71.2	17	11.1	19	12.4

TABLE X (Continued)

Activities	N*	D ONLY		FSM ONLY		BOTH D AND FSM		NEITHER D OR FSM	
		f	%	f	%	f	%	f	%
<u>QUALITY</u>									
(1) Sponsor participant advisory council on foodservice	153	20	13.1	64	41.8	17	11.1	52	34
(2) Conduct sanitation inspections	153	26	17	79	51.6	40	26.1	8	5.3
(3) Check temperatures of foods served	153	11	7.2	100	65.4	38	24.8	4	2.6
(4) Use detailed specifications when purchasing food, equipment and supplies	153	24	15.7	75	49	16	10.5	38	24.8
(5) Calculate dietary analysis	153	70	45.8	36	23.5	9	5.9	38	24.8
<u>QUALITY OF WORKLIFE</u>									
(1) Conduct training sessions for employees	153	31	20.3	73	47.7	33	21.6	16	10.4
(2) Use written job satisfaction questionnaires	153	5	3.3	60	39.2	11	7.2	77	50.3
(3) Maintain employee suggestion system	153	8	5.2	78	51	21	13.7	46	30.1
<u>INNOVATION</u>									
(1) Involve patrons in testing recipes	153	19	12.4	44	28.8	19	12.4	71	46.4
(2) Use computer in operation	153	14	9.2	21	13.7	9	5.9	109	71.2

*N = varied from 143 to 155

This suggests additional training of management personnel in the area of nutrition education, and in planning of organizational goals. The largest response to frequency of involvement of participants in menu planning was the "never" category, which was indicated by over 30 percent of the respondents.

Six activities were performed by the foodservice manager alone more than 50 percent of the time. The first activity, follow-up on program dropouts, was conducted approximately three-fourths of the time by foodservice managers only. This activity was performed always or usually over 75 percent of the time. Sixty-eight percent of the respondents noted that it was the foodservice managers who check plate waste. The second activity was performed always or usually 77 percent of the time. The third activity, obtain participants evaluation of foodservice, was performed by foodservice managers only 60 percent, and by both the foodservice manager and dietitian over 20 percent of the time. This activity was performed always or usually nearly three-fourths of the time. Seventy-eight percent of the respondents noted that it was the foodservice manager who was responsible for home-delivered meals prepared for participants unable to attend the meal site. Nearly 90 percent of the responses listed this fourth activity as being performed always or usually. Plan special events or featured days, the fifth activity, was performed by 72 percent of the foodservice managers and by both the foodservice manager and the dietitian approximately 20 percent of the time. This activity was always or usually performed over 80 percent of the time. The sixth activity, maintain systems for utilization of leftovers, was performed by the foodservice manager 55 percent, while one-fourth responded that the activity was not

TABLE XI
FREQUENCY OF PERFORMANCE

Activities		N*	ALWAYS		USUALLY		SOMETIMES		RARELY		NEVER	
			f	%	f	%	f	%	f	%	f	%
<u>EFFECTIVENESS</u>												
(1)	Conduct classes for participants on nutrition education	153	67	43.8	38	24.8	28	18.3	4	2.6	16	10.5
(2)	Follow-up on program dropouts	153	62	40.5	56	36.6	9	5.9	5	3.3	21	13.7
(3)	Check plate waste	152	70	46.1	47	30.9	19	12.5	4	2.6	12	7.9
(4)	Obtain participant evaluation of foodservice	153	62	40.6	51	33.3	28	18.3	6	3.9	6	3.9
(5)	Involve participants in menu planning	153	29	19	29	19	41	26.8	6	3.9	48	31.3
(6)	Provide choice in meal items	153	19	12.4	19	12.4	30	19.6	18	11.8	67	43.8
(7)	Home-delivered meals prepared for participants unable to attend meal site	153	124	81	12	7.8	7	4.6	1	0.7	9	5.9
(8)	Special meals (health related and/or religious-ethnic) offered to participants	152	46	30.3	13	8.6	19	12.5	7	4.6	67	44.0
(9)	Plan special events on featured days	153	83	54.2	42	27.5	17	11.1	2	1.3	9	5.9

TABLE XI (Continued)

Activities	N*	ALWAYS		USUALLY		SOMETIMES		RARELY		NEVER	
		f	%	f	%	f	%	f	%	f	%
(10) Compare actual foodservice performance to forecasted performances	153	47	30.7	30	19.6	14	9.2	6	3.9	56	36.6
(11) Use production schedule	153	45	29.5	26	17	10	6.5	10	6.5	62	40.5
(12) Maintain system for utilization of leftovers	153	70	45.8	32	21	7	4.6	3	1.8	41	26.8
<u>PRODUCTIVITY</u>											
(1) Daily attendance record maintained	153	134	87.6	11	7.2	2	1.3	0	0	6	3.9
(2) Plan menus using standardized recipes	153	114	74.5	7	4.6	4	2.6	0	0	28	18.3
(3) Evaluate labor costs	152	73	48.1	23	15.1	10	6.6	4	2.6	42	27.6
(4) Meal production planned according to daily participation	151	110	72.9	24	15.9	5	3.3	2	1.3	10	6.6
(5) Monitor turnover, absenteeism, and tardiness of employees	145	80	55.1	24	16.6	9	6.2	5	3.5	27	18.6
(6) Review and revise job descriptions annually	155	72	46.5	22	14.2	16	10.3	5	3.2	40	25.8
(7) Comparison shop for food and supplies	153	74	48.4	30	19.6	10	6.5	3	2.0	36	23.5
(8) Conduct physical inventory of storeroom	152	105	69.1	21	13.8	6	3.9	1	0.7	19	12.5

TABLE XI (Continued)

Activities	N*	ALWAYS		USUALLY		SOMETIMES		RARELY		NEVER	
		f	%	f	%	f	%	f	%	f	%
<u>QUALITY</u>											
(1) Sponsor participant advisory council on foodservice	155	45	29	21	13.6	19	12.2	17	11	53	34.2
(2) Conduct sanitation inspections	153	112	73.2	18	11.8	15	9.8	0	0	8	5.2
(3) Check temperatures of foods served	153	121	79.1	24	15.7	4	2.6	0	0	4	2.6
(4) Use detailed specifications when purchasing food, equipment and supplies	153	65	42.5	25	16.3	14	9.2	9	5.9	40	26.1
(5) Calculate dietary analysis	153	75	49	21	13.7	11	7.2	4	2.6	42	27.5
<u>QUALITY OF WORKLIFE</u>											
(1) Conduct training sessions for employees	153	81	53	32	21	18	11.7	4	2.6	18	11.7
(2) Use written job satisfaction questionnaires	153	40	26.1	18	11.8	11	7.2	7	4.6	77	50.3
(3) Maintain employee suggestion system	153	44	28.7	33	21.6	20	13.1	7	4.6	49	32
<u>INNOVATION</u>											
(1) Involve patrons in testing recipes	151	19	12.6	17	11.3	27	17.9	10	6.6	78	51.6
(2) Use computer in operation	153	13	8.5	7	4.6	3	2	4	2.6	126	82.3

*N = varied from 144 to 155

percent of the responses. The same percentage of responses noted that this activity always took place. Meal production planned according to daily participation, the second activity, was performed 70 percent of the time by the foodservice manager. Seventy-three percent of the responses indicated that this activity was always performed, and 16 percent noted that it was usually performed. Two-thirds of the respondents indicated that the foodservice manager was responsible for monitoring turnover, absenteeism, and tardiness of employees, the third activity. Twenty percent of the respondents indicated that no one performed this activity. In contrast, over 70 percent of those responding listed this activity as always or usually being performed. The fourth activity, review and revise job descriptions annually, was performed by the foodservice manager only, 55 percent of the time, while 26 percent of the responses noted that no one performed the activity. Sixty percent of those responding, always or usually, performed the activity, while 26 percent never performed the activity. Fifty percent of the respondents reported that the foodservice manager did comparison shop for food and supplies, the fifth activity. Fifty-eight percent of the respondents indicated that the activity was always or usually performed while the contrary was reported by approximately one-fourth of the respondents. This activity was performed with a higher frequency by restaurateurs observed in a previous study (Lamb, 1984). Over seventy percent responded that the foodservice manager was the one to conduct physical inventory of the storeroom, the sixth activity. Seventy percent reported that this activity always occurred. A single activity, evaluate labor costs, was performed by the foodservice manager 42 percent of the time, while 28 percent responded that no

Fifty-nine percent reported that this activity always or usually took place, while 26 percent responded that the performance never happened. The final quality activity measure, sponsor participant advisory council on foodservice, was performed 42 percent of the time by the foodservice managers and 34 percent of the time by no one. Forty-two percent responded that the activity always or usually occurred, while 34 percent indicated that the activity never took place.

Quality of Worklife

There were no groupings of similar responses with the three QWL activity measures. Maintaining employee suggestion system, was performed by the foodservice manager 51 percent of the time while 30 percent responded that no one performed the activity. Fifty percent of the respondents reported that the activity always or usually occurred, while 32 percent indicated that it never took place. The second activity, conduct training sessions for employees, was performed by the foodservice managers 48 percent of the time, by both dietitians and foodservice managers 22 percent of the time, and by dietitians only 20 percent of the time. Seventy-four percent reported that this activity was performed always or usually. The third activity, use written job satisfaction questionnaires, was reported as performed by no one in 50 percent of the responses. Thirty-nine percent indicated that the foodservice manager performed this activity. Fifty percent of the responses noted that this activity never took place while 38 percent reported it always or usually was performed in their operations. The current data compares to that obtained in a previous study by an OSU researcher (Pickerel, 1984).

performed at all. Sixty-six percent of the respondents indicated that the activity was always or usually performed while 27 percent reported the contrary.

Two activities were performed by the foodservice manager approximately 40 percent of the time, and not performed by anyone more than one-third of the time. The two activities, compare actual foodservice performance to forecasted performance, and use production schedule, were listed as being performed always or usually half of the time, while never performed was checked by 40 percent of the respondents. These figures were approximate to those obtained by an OSU researcher (Pickerel, 1984) in a study of Missouri restaurants.

Two activities, provide choice in meal items, and special meals (health related and/or religious-ethnic) offered to participants, were not performed in 38 percent of the responding operations. Thirty percent indicated that only the foodservice manager performed this activity. Forty-four percent of the responses noted that this activity was never performed while 40 percent noted that providing special meals was always or usually performed in the foodservice operation.

Productivity

A single activity, plan menus using standardized recipes, was performed by dietitians only 50 percent of the time. As in the case with nutrition education, this activity was mandated by Congress as an integral element of the Elderly Nutrition Program foodservice operations. Six activities were performed by the foodservice manager alone over 50 percent of the time. The first activity, daily attendance records maintained, was performed by the foodservice manager in 87

one performed this activity. Sixty-three percent of those responding reported that the activity always or usually was performed, while 28 percent noted that the activity was never performed. These figures were much lower than those obtained from a study of commercial foodservice operators (Lamb, 1984).

Quality

A single activity, calculate dietary analysis, was performed by the dietitian 46 percent of the time. The foodservice manager only performed this activity 24 percent and no one performed it 25 percent of the time. Fifty percent of the respondents always performed this activity while 28 percent never performed the activity. Three activities were performed 50 percent of the time by the foodservice manager only. The first, conduct sanitation inspections, was performed 52 percent of the time by the foodservice manager and 26 percent of the time by both the foodservice manager and dietitian. The first number was similar to that obtained from a study of restaurants (Pickerel, 1984). Eighty-five percent reported that this activity always or usually was performed. Check temperatures of foods served, the second activity, was performed by 65 percent of foodservice managers only, however, 25 percent reported that both the foodservice manager and dietitian performed the activity. Seventy-nine percent reported that this activity always occurred. In a study of Missouri restaurateurs (Pickerel, 1984), 100 percent of the respondents indicated they checked temperatures of food served. The third activity, use detailed specification when purchasing food, equipment, and supplies, was performed 50 percent of the time by foodservice managers while no one performed the activity 25 percent of the time.

Innovation

The majority of respondents did not perform the two innovation measures. The first, involve patrons in testing recipes, was not performed by anyone in 46 percent of the responses, with 29 percent reporting that the foodservice manager performed the activity. Fifty-two percent of those responding noted that the activity never took place while less than one-fourth reported that it always or usually occurred. The second activity, use computer in operation, was performed by no one in 71 percent of the responses. In addition, 82 percent of all responses reported that this activity never occurred. Previous research at OSU has reported that use of a computer was found primarily in large-scale foodservice operations (Pickere1, 1984). In a study of Oklahoma consultant dietitians, only five percent were using a computer in their work (Faye, 1983).

Performance Measures Summary

Foodservice management personnel in the Elderly Nutrition Program are measuring performance in their operations. The frequency of performance however, needs improvement. Evaluative activities were performed infrequently, suggesting training in these topics. Certain activities mandated by law to be always performed were found to be negligent, again indicating the need for professional training of program management personnel.

Attitudes Toward Aging

The results of responses to the attitudes toward aging section of the questionnaire are presented in Table XII. The seven items were

TABLE XII
ATTITUDES TOWARD AGING

Statement	N*	x	1		2		3		4		5		6		7	
			f	%	f	%	f	%	f	%	f	%	f	%	f	%
(1) Free to do things - Not free to do things	153	5.13	41	26.8	21	13.7	43	22.2	40	26.1	10	6.5	5	3.3	2	1.4
(2) Useless - Useful	153	5.73	4	2.6	6	3.9	4	2.6	17	11.1	18	11.8	38	24.9	66	43.1
(3) Looking to the future - Looking to the past	153	4.17	19	12.4	15	9.8	21	13.7	49	32	27	17.7	11	7.2	11	7.2
(4) Ineffective - Effective	153	5.27	1	0.6	3	2.0	8	5.2	36	23.4	34	22.1	37	24	35	22.7
(5) Satisfied with life - Dissatisfied with life	153	4.76	26	17	30	19.6	21	13.7	46	30	20	13.1	7	4.6	3	2.0
(6) Respected - Disregarded	153	5.22	53	34.6	26	17	18	11.8	27	17.7	18	11.8	9	5.9	2	1.2
(7) Busy - Inactive	153	4.76	28	18.3	21	13.7	36	23.6	42	27.5	10	6.5	12	7.8	4	2.6

* x adjusted to reflect reverse scoring

assigned a mean rating based on the frequency scores. In general, respondents to this survey have a favorable attitude toward the aged and aging. Statements (1), (3), (5), (6), and (7) were reversed in scoring to generate comparable means. Respondents were strongest in their attitude toward statement (2), useless to useful. The mean of 5.73 reflects a positive attitude, and agreement with the statement that old people in general are useful. Approximately four-fifths of the responses circled the positive side of the semantic differential for this statement. Statement (4), ineffective to effective, produced the second strongest response. The mean of 5.27 reflects a positive attitude, and agreement with the statement that old people in general are effective. Over two-thirds of the responses circled the positive side of the semantic differential for this statement. Statement (6), respected to disregarded, was the third strongest response. The mean of 5.22 also reflects a positive attitude, and agreement with the statement that old people in general are respected. Sixty-three percent of the responses circled the positive side of the semantic differential for this statement. Statement (1), free to do things to not free to do things, also produced a favorable response. The mean of 5.13 reflects a positive attitude and agreement with the statement that old people in general are free to do things. Sixty-three percent of the responses circled the positive side of the semantic differential for this statement. Statement (5), satisfied with life to dissatisfied with life, and statement (7), busy to inactive, both produced a slightly positive response. Both statements had a mean of 4.76, reflecting a somewhat positive attitude and general agreement with the statements that old people in general are satisfied with life, and old people in general are busy. Approximately

57 percent of the responses to these statements fell in the mid-range (3-5) of the semantic differential. Statement (3), looking to the future to looking to the past, produced the weakest response. The mean of 4.17 reflects an indifferent attitude and in general cannot agree or disagree with either end of the semantic differential. Sixty-three percent of the responses circled the mid-range of the semantic differential. Previous research on attitudes toward aging of management personnel in the Elderly Nutrition Program, as well as in any foodservice operation, has not been attempted, therefore no direct comparisons may be stated. The literature reveals no clear acceptance of method of study, nor any discernible pattern to significant relationships.

Political Activities

The responses to the statements in the political activities section of the questionnaire indicate that as a group, management personnel in the Elderly Nutrition Program are similar to what has been called spectators (Milbrath, 1972). Frequency and percentage of response, and mean values are presented for each statement in Table XIII. Statement (1) produced the most positive response to political activity. The mean of 1.43 suggests that the group in general votes in elections. Over 92 percent of the respondents listed this activity as occurring at all times or frequently. Statement (3), supported political issues related to aging or nutrition through monetary or volunteer contributions, also produced a positive response to political activity. The mean of 2.39 suggests that the group does support issues of interest through contributions of varied resources. Seventy percent of the respondents reported this activity occurring at all times or frequently. Statement

TABLE XIII
POLITICAL ACTIVITIES

Activity	N*	x	At all times		Frequently		Sometimes		Rarely		Never	
			f	%	f	%	f	%	f	%	f	%
(1) Voted in elections	153	1.43	106	69.3	35	22.9	8	5.3	2	1.25	2	1.25
(2) Attended political conventions at the county, state or national level	153	3.88	7	4.6	27	22.2	29	19	34	22.2	66	43.1
(3) Supported political issues related to aging on nutrition through monetary or volunteer contributions	153	2.39	54	35.3	38	24.8	30	19.6	9	5.9	22	14.4
(4) Attended or testified at hearings on political issues related to aging or nutrition	153	3.69	15	9.8	18	11.8	33	21.6	20	13	67	43.8
(5) Met with legislators to discuss political issues related to aging or nutrition	153	3.67	7	4.6	23	15	43	28.1	21	13.7	59	38.6
(6) Signed petitions related to aging or nutrition political issues	153	3.05	24	15.7	37	24.2	37	24.2	17	11.1	38	24.8
(7) Ran for local, county, state or national office	153	4.8	1	0.65	1	0.65	7	4.6	9	5.9	135	88.2

(6), signed petitions related to aging or nutrition political issues, was generally regarded indifferently. The mean of 3.05 suggests that this activity sometimes occurs and sometimes does not. Approximately one-fourth of the respondents reported this activity occurred frequently, one-fourth reported it sometimes, and one-fourth reported it never occurred. Statement (4), attended or testified at hearings on political issues related to aging or nutrition, and statement (5), met with legislators to discuss political issues related to aging or nutrition, in general are rarely performed by the respondents. The mean values, 3.69 and 3.67 respectively, suggest these activities may sometimes occur, but rarely do. Forty-four percent of the responses to statement (4) indicated that this activity never took place. Thirty-nine percent of the responses to statement (5) reported that this activity never occurred while 28 percent checked that it sometimes happened. Statement (2), attended political conventions at the county, state or national level, was rarely accomplished. The mean of 3.88 suggests that this group rarely attends actual political caucuses. Sixty-five percent of those responding reported that they rarely or never performed this activity. Statement (7), ran for local, county, state or national office, resulted in the weakest response to political activity. The mean of 4.8 suggests that this group almost never actually competes for political office. Eighty-eight percent reported that they never ran for any political office, only one respondent had run for an elected position several times. Political activities of management personnel in the Elderly Nutrition Program, as well as those of other foodservice operations, have not been previously studied. While there has been increased awareness of political issues, most

members of the population choose to remain spectators who will vote regularly, but engage in few other political activities.

Testing the Hypotheses

H : There would be no significant difference between the level and
type of program activity of the elderly nutrition services and manage-
ment performance measures. Chi square values were determined for the relationship between the six management performance measures (effectiveness, productivity, quality, quality of worklife, innovation, and total performance) and the thirteen program descriptors. Differences were considered to be significant at $P \leq .05$. Fourteen significant differences were found, and are presented in Table XIV. Initial chi square analysis utilized performance measures scores with program characteristics data. There were 12 effectiveness measures, with scores ranging from 12 to 60. The researcher decided, after conferring with the statistical consultant, to establish levels of effectiveness based on the scores obtained. A score of 24 or less was designated level one, or a low level of effectiveness. A score greater than 24 but less than or equal to 36 was designated level two, or a medium level of effectiveness. A score greater than 36 was designated level three, or a high level of effectiveness. There were eight productivity measures, with scores ranging from eight to forty. A score of 16 or less was designated level one, or a low level of productivity. A score greater than 16 but less than or equal to 24 was designated level two, or a medium level of productivity. A score greater than 24 was designated level three, or a high level of productivity. There were five quality measures, with scores ranging from five to 25. A score of ten or less

TABLE XIV
CHI SQUARE DETERMINATIONS BETWEEN PERFORMANCE MEASURES AND PROGRAM CHARACTERISTICS

PERFORMANCE MEASURES		PROGRAM CHARACTERISTICS				
		FACILITY	METHOD OF SERVICE	DAYS OF SERVICE	MEALS	PART TIME EMPLOYEES VOLUNTEERS
Effectiveness	x	22.669	15.645		13.737	
	df	12	8		4	
	PROB	0.03	0.04		0.0082	
Productivity	x	30.052	24.679		25.240	
	df	12	8		4	
	PROB	0.002	0.001		0.0001	
Quality	x	29.160			22.090	
	df	12			4	
	PROB	0.003			0.0002	
QWL	x				20.976	21.890 11.222
	df				4	6 4
	PROB				0.0003	0.0013 0.0242
Innovation	x			14.105	11.236	
	df			6	4	
	PROB			0.02	0.0240	
Total	x				21.167	
	df				4	
	PROB				0.0003	

was designated level one, or a low level of quality. A score greater than 10 but less than or equal to 15 was designated level three, or a high level of quality. There were three quality of worklife measures, with scores ranging from three to 15. A score of six or less was designated level one, or a low level of quality of worklife. A score greater than six but less than or equal to nine was designated level two, or a medium level of quality of worklife. A score greater than nine was designated level three, or a high level of quality of worklife. There were two innovation measures, with scores ranging from two to 10. A score of four or less was designated level one, or a low level of innovation. A score greater than four but less than or equal to six was designated level two, or a medium level of innovation. A score greater than six was designated level three, or a high level of innovation. There were 30 total performance measures, with scores ranging from 30 to 150. A score of 60 or less was designated level one, or a low level of total performance. A score greater than 60 but less than or equal to 90 was designated level two, or a medium level of total performance. A score greater than 90 was designated level three, or a high level of total performance.

A number of the program characteristics used in the analysis were also divided into categories, due to the multitude of values obtained. A facility serving 50 or less meals was designated category one. A facility serving greater than 50 but less than or equal to 100 meals was designated category two. A facility serving greater than 100 meals was designated category three. A facility with three or less volunteers was designated category one. A facility with greater than three but less

than or equal to six volunteers was designated category two. A facility with greater than six volunteers was designated category three.

Differences were found between all six management performance measures and the number of meals served. Meal sites serving more than 50 meals per day were associated with a high level of effectiveness, productivity, quality, quality of worklife and total performance. Meal sites serving more than 50 meals each day were associated with a low level of innovation, but not as low as sites serving less than 50 meals each day (Tables XX through XXV, Appendix G). These high levels may be the result of economies of scale, or since they are usually associated with a community or senior citizen center the sites emphasize service to the elderly.

Differences were found between four performance measures, effectiveness, productivity, quality, and total performance, and type of facility. Community centers and senior citizen centers cited from the "other" category tended to be associated with a high level of performance measurement for all four measures. A meal site located in a school was likely to be associated with a high level of productivity and quality measurement (Tables XXVI through XXIX, Appendix G).

Differences were found between two performance measures, effectiveness and productivity, and method of meal service. Cafeteria style and combination style, which was noted as essentially cafeteria style with extended service to selected participants, tended to be associated with a high level of effectiveness and productivity. Restaurant-style service was associated with a high level of effectiveness, and to a lesser degree, a high level of productivity (Tables XXX and XXXI, Appendix G). Cafeteria style allows for faster service since participants move

through a line receiving each item of the meal. Restaurant style utilizes actual table service, where participants receive their meal from a site worker or volunteer.

Differences were found between quality of worklife and the number of part-time employees, and the number of volunteers. A meal site employing two or three part-time employees tended to be associated with a higher level of quality of worklife than a site employing three or more part-time workers or a site with just one part time employee. Meal sites with three to six volunteers tended to be associated with a high degree of quality of worklife, while sites with more than six volunteers were somewhat associated with a high degree of quality of worklife (Tables XXXII and XXXIII, Appendix G).

Differences were found between innovation and number of days of meal service. A meal site serving 5-6 days per week was associated with a low level of innovation (Table XXXIV, Appendix G). In general, elderly nutrition meal sites did not utilize innovative techniques.

T-tests were used to determine the effect of various services available on performance measures through calculation of mean differences. Differences were considered to be significant at $P = .05$. Eight differences were found between services and effectiveness (Table XXXV, Appendix H). Sites which offered outreach services, escort services, counseling, information and referral, shopping assistance, financial services, recreation, and any other activities had a higher effectiveness score than sites which did not offer such services. Four differences were found between services and productivity (Table XXXVI, Appendix H). Sites which offer outreach services, escort services, information and referral, and recreation had a higher productivity score

than sites which did not offer such services. Five differences were found between service and quality (Table XXXVII, Appendix H). Outreach services, escort services, information and referral, shopping assistance, and recreation were services offered by sites with higher quality scores than sites which did not offer such services. Seven differences were found between services and quality of worklife (Table XXXVIII, Appendix H). Presence of outreach services, escort services, counseling, information and referral, shopping assistance, financial services, and any other service was found with higher quality of worklife scores. Six differences were found between services and total performance (Table XXXIX, Appendix H). Sites which offered outreach services, escort services, counseling, information and referral, shopping assistance, and recreation had a higher total performance score than sites which did not offer such services. In general, services provided associate with high level of performance. A site which provides additional services appears to be committed to a well-run nutrition program. This would seem apparent, as such sites try to provide participants with maximum resource availability. Based on differences found between management performance measures and program characteristics, the researcher finds evidence to reject H .

1

H : There would be no significant difference between management
2 performance measures and demographic characteristics of the respondents.

Chi square values were determined for the relationship between the six management performance measures and the 17 demographic descriptions. Differences were considered to be significant at $P \leq .05$. Fifteen significant differences were found, and are presented in Table XV.

TABLE XV
CHI SQUARE DETERMINATIONS BETWEEN PERFORMANCE MEASURES AND DEMOGRAPHIC CHARACTERISTICS

		TITLE	YEARS OF PREVIOUS EMPLOYMENT	PREVIOUS POSITION	PREVIOUS STATUS	R.D. STATUS	ROUTE TO R.D.	STATE	SEX	MARITAL STATUS
Effectiveness	x		20.250		10.340					
	df		11		4					
	PROB		0.0420		0.0351					
Productivity	x				13.138			15.975		
	df				4			8		
	PROB				0.0106			0.0427		
Quality	x				12.466		9.090			9.067
	df				4		2			4
	PROB				0.0142		0.0106			0.0595
QWL	x	13.577		29.664		11.324				
	df	4		14		4				
	PROB	0.0088		0.0085		0.0232				
Innovation	x				20.095				6.918	10.779
	df				4				2	4
	PROB				0.0005				0.0315	0.0292
Total	x				13.351			19.223		
	df				4			8		
	PROB				0.0097			0.0137		

Differences were found between five performance measures, effectiveness, productivity, quality, innovation, and total performance and position status (Tables XL through XLIV, Appendix I). Full-time employment status was associated with high levels of effectiveness, productivity, quality, and total performance. Respondents working less than full time tended to be associated with a low level of innovation. Management personnel who are full time would appear to be more committed to their job, and consequently their performance would be more important to them than to management personnel for whom the position was simply a job to do.

Differences were found between two performance measures, productivity and total performance, and state of residence (Tables XLV and XLVI, Appendix I). Residents of Arkansas, Louisiana, Oklahoma, and Texas tended to be associated with a high level of productivity and total performance. Differences were found between two performance measures, quality and innovation, and marital status (Tables XLVII and XLVIII, Appendix I). Respondents who had never married tended to be associated with a high level of quality and innovation. These respondents likely had more time to spend on the job and were willing to attempt alternatives in the pursuit of program goals. Married respondents and those who had been previously married were associated with a high level of quality and a low level of innovation.

Differences were found between quality of worklife and three demographic characteristics, title, previous position, and R. D. status (Table XLIX through LI, Appendix I). Respondents with a position title of meal site manager tended to be associated with a high level of QWL.

Differences were found between effectiveness and years of previous employment (Table LII, Appendix I). In general, any previous employment in the Elderly Nutrition Program was associated with a high level of effectiveness. Differences were found between quality and route to R.D. registration (Table LIII, Appendix I). Dietitians who had graduated from an internship or had a graduate degree plus work experience tended to be associated with a high level of quality. Differences were found between innovation and sex of the respondent (Table LIV, Appendix I). Females were more likely to be associated with low levels of innovation. The use of a computer was one of the measures utilized to judge innovation. As in a study by Faye (1982), nutrition management personnel do not generally utilize computers. This area requires training, as the computer can serve to streamline foodservice operations.

T-tests were used to determine the effect of benefits provided and professional organizational membership on performance measures through calculations of mean differences. Differences were considered to be significant at $P \leq .05$. Six differences were found between benefits and effectiveness (Table LV, Appendix J). Respondents who had paid vacation, paid holidays, paid sick leave, medical plan, paid maternity leave, and a pension plan had a higher effectiveness score than respondents who did not have such benefits. A lone difference was found between paid sick leave and productivity (Table LVI, Appendix J). Those reporting such a benefit had a higher productivity score than those who did not have such a benefit. Four differences were found between benefits and quality of worklife (Table LVII, Appendix J). Those receiving paid vacation, paid holidays, and paid sick leave had a higher quality of worklife score than those not reporting such benefits. Respondents

who did not receive accidental death and dismemberment insurance had a higher quality of worklife score than individuals in the sample not receiving such benefits. This result may be explained as due to chance. Four differences were found between benefits and total performance (Table LVIII, Appendix J). Respondents who received paid vacation, paid holiday, and paid sick leave had a higher total performance score than those not reporting such benefits. Respondents not receiving accidental death and dismemberment insurance had a lower total performance score than those receiving such benefit. A benefits package would appear to improve the performance of an individual. Benefits provide additional security and incentive to management personnel.

Membership in two organizations was found to produce differences in effectiveness (Table LIX, Appendix J). Respondents who were members of The American Dietetic Association (ADA) and the Society for Nutrition Education (SNE) had higher effectiveness score than those who were not members of the two organizations. Five differences were found between membership and productivity (Table LX, Appendix J). Respondents who were members of ADA, SNE, American Home Economics Association (AHEA), Dietary Managers Association, and any other organization had higher productivity scores than respondents who were not members of these organizations. Three differences were found between membership and quality (Table LXI, Appendix J). Respondents who were members of ADA, SNE, and the Dietary Managers Association had higher quality scores than those who were not members of these organizations. Respondents who were members of SNE and the Dietary Managers Association had higher quality of worklife scores than those who were not members of the organizations (Table LXII, Appendix J). Three differences were found between

membership and total performance (Table LXIII, Appendix J). Members of ADA, SNE, and Dietary Managers Associations had higher total performance scores than respondents not belonging to such organizations. Organizational membership provides the opportunity for communication with other professionals. This sharing of information can create awareness and understanding of new, and often improved management principles. Based on the differences found between management performance measures and program characteristics, the researcher finds evidence to reject H_2 .

H_3 : There would be no significant difference between the level and type of program activity and respondents' attitudes toward aging and the aged. Analysis of variance was used to determine whether any differences existed among the groups defined by the program characteristics and attitudes. Differences were considered to be significant at $P \leq .05$. A single difference was found between one of the services available at the meal site, recreation, and attitudes toward aging ($P = 0.0219$). Meal sites offering recreation as an available service were likely to have a positive attitude towards aging and the aged. This lone difference does not allow the researcher to reject H_3 . In general, there was no observable difference in the sample between program characteristics and attitudes toward aging.

H_4 : There would be no significant difference between demographic characteristics of respondents and their attitudes toward aging and the aged. Analysis of variance was used to determine if any differences existed among the groups defined by the demographic characteristics and attitudes. Differences were considered to be significant at $P \leq .05$.

Three differences were found between demographic characteristics and attitudes, R.D. status ($P = 0.035$), uniform provided under benefits

($P = 0.0074$), and membership in the Society for Nutrition Education ($P = 0.0417$). Dietitians who were registered only tended to have a less positive attitude toward aging than dietitians who were both registered and licensed, and respondents who were not registered. Respondents who received a uniform as a job benefit tended to have a more positive attitude towards aging, as did those who did not belong to the Society for Nutrition Education. While these differences theoretically provide the basis for rejection of H_4 , the researcher questions whether these limited differences truly indicate significant differences between demographic characteristics of the respondents and their attitude toward aging and the aged.

H_5 : There would be no significant difference between the level and type of program activity and political activities of the respondents. Analysis of variance was used to determine if any differences existed among the groups defined by the program characteristics and political activities. Differences were considered to be significant at $P \leq .05$.

Eight differences were found through the analysis of variance procedure. Presence of outreach services, escort services, counseling, information and referral, shopping assistance, and recreation indicated a more positive political activity score than lack of such services. Sites serving 50 to 100 daily meals had respondents indicating a higher political activity score than those from sites serving less than 50 daily meals. Sites serving more than 100 daily meals were not significantly different from either of the previous categories. Sites with three or more volunteers indicated a respondent with a higher political activity score than sites with less than three volunteers. The

differences observed indicate that larger sites employ management personnel more likely to engage in political activities. These sites may provide the atmosphere for such activities, whereas smaller sites may be located in communities where open display of political activities would not be favorably looked upon. Based on the observable differences, the researcher rejects H_5 .

H_6 : There would be no significant difference between demographic characteristics of respondents and their political activities. Analysis of variance was used to determine if any differences existed among the groups defined by the demographic characteristics and political activities. Differences were considered to be significant at $P \leq .05$ (Tables XVI and XVII). Four benefits provided: paid vacation, paid holidays, paid sick leave, and paid maternity leave, affected political activities significantly. Respondents who were members of the Republican Party ($n = 16$, $X = 15.00$) had significantly lower political activity scores than members of other political parties, or of no party designation. This seems unusual in light of recent activism within the Republican Party. Those who had been in their current position more than ten years had significantly higher political activity scores than respondents who had been in their current position three to five years, one to two years, and less than one year. These individuals were likely more secure in their positions, and had no fear of demonstrating their political interests. No significant difference was noted between those who had been in their current position one to 10 years and those who had in their current position more than ten years. Respondents over 70 had significantly higher political activity scores than those in the age group 60 to 69, 40 to 49, 30 to 39, and 20 to 29. No significant difference was

TABLE XVI
ANALYSIS OF VARIANCE RESULTS FOR POLITICAL ACTIVITIES
BY DEMOGRAPHIC CHARACTERISTICS

SOURCE	df	MS	F	PROB
Time in Current Position	4	119.52	5.25	0.0006
Error	148	22.76		
Total	152			
Position Status	2	145.99	6.24	0.0025
Error	146	23.39		
Total	148			
Route to R.D.	2	123.36	6.19	0.0102
Error	16	19.94		
Total	18			
Political Rally	3	103.06	4.34	0.0059
Error	149	23.74		
Total	152			
Age	5	69.82	2.93	0.0149
Error	147	23.79		
Total	152			

TABLE XVII
DUNCAN MULTIPLE RANGE TEST FOR POLITICAL ACTIVITIES
BY DEMOGRAPHIC CHARACTERISTICS

VARIABLES _i	N	MEAN	GROUPING*
<u>Time in Current Position</u>			
Less than 1 year	15	16.267	C
1 - 2 years	34	17.294	B C
3 - 5 years	40	19.050	B C
6 - 10 years	47	20.021	A B
More than 10 years	17	22.588	A
<u>Position Status</u>			
Full time (less than 35 hours)	72	20.389	A
At least 20 hours but less than 35 hours	57	18.351	A B
Less than 20 hours	20	16.450	B
<u>Route to Dietetic Registration</u>			
Internship	15	16.80	A B
CUP	1	11.00	B
Graduate degree plus work experience	3	25.667	A
<u>Political Party</u>			
Democrat	104	19.721	A
Independent	17	19.059	A
Republican	16	15.000	B
Other	16	19.000	A
<u>Age</u>			
20 - 29	11	16.273	C
30 - 39	25	18.360	B C
40 - 49	33	17.970	B C
50 - 59	49	20.347	A B
60 - 69	23	18.435	B C
over 70	12	22.250	A

noted between those in the age group 50 to 59 and those over 70. Older respondents may identify more closely with program participants, and may be more willing to express their political interests in order to support their fellow senior citizens. Full-time respondents reported higher political activity scores than those working less than 20 hours each week. No significant difference was noted between those who worked 20 to 35 hours per week and full-time respondents, or those who worked less than twenty hours per week. Dietitians who became registered through a graduate degree plus work experience had significantly higher political activity score than those who graduated from a coordinated undergraduate program (CUP). No significant difference was noted between those who became registered by way of an internship and those from a CUP, or from the graduate degree alternative. Based on these differences, the researcher rejects H_0 .

H_1 : There would be no significant difference between attitudes toward aging and the aged and management performance measures. Chi square values were determined for the relationship between the six management performance measures and attitudes towards aging. Differences were considered to be significant at $P \leq .05$. Differences were found between four management performance measures and attitudes towards aging (Table XVIII). High levels of effectiveness, productivity, quality, and total performance tended to be associated with a high or mid-range attitudes score (Tables LXIV through LXVII, Appendix K). A positive attitude toward aging was evident among the survey population. Data obtained indicate that individuals with strong positive attitudes tend to perform at higher levels. This data suggests that such individuals are working in this management position to serve the elderly

TABLE XVIII
CHI SQUARE DETERMINATIONS BETWEEN ATTITUDES TOWARD
AGING AND PERFORMANCE MEASURES

PEFORMANCE MEASURES		ATTITUDES TOWARD AGING
Effectiveness	χ^2	32.076
	df	4
	PROB	0.0001
Productivity	χ^2	17.852
	df	4
	PROB	0.0013
Quality	χ^2	18.839
	df	4
	PROB	0.0008
Total	χ^2	20.946
	df	4
	PROB	0.0003

population to the best of their ability. This data lends support to the use of attitude measuring instruments in recruitment and training of elder nutrition program management personnel. Based on these differences the researcher rejects H .

7

H : There would be no significant difference between political activities of respondents and management performance measures. Chi square values were determined for the relationship between the six management performance measures and political activities. Differences were considered to be significant at $P \leq .05$. Differences were found between five management performance measures and political activities (Table XIX). High levels of effectiveness, productivity, quality, and total performance tended to associate with a high or mid-range political activities score. (Tables LXVIII through LXXII, Appendix L). A high level of quality of worklife was associated with a high political activity score. The political activity score measured specific activities related to nutrition and aging issues. A high score indicated strong political activity, and was shown to be associated with high levels of performance. As in H with attitudes, individuals that are concerned with the elderly as a group, expressed through attitudes or political activities, are likely to be more concerned with their management performance. This suggests that political activity focusing on elderly or nutrition issues may serve as a stimulus for stronger management performance. Based on these differences, the researcher rejects H .

TABLE XIX
CHI SQUARE DETERMINATIONS BETWEEN ATTITUDES TOWARD
AGING AND PERFORMANCE MEASURES

PERFORMANCE MEASURES		ATTITUDES TOWARD AGING
Effectiveness	χ^2	23.305
	df	4
	PROB	0.0001
Productivity	χ^2	16.669
	df	4
	PROB	0.0022
Quality	χ^2	13.763
	df	4
	PROB	0.0081
Quality of Work Life	χ^2	23.018
	df	4
	PROB	0.0001
Total	χ^2	18.444
	df	4
	PROB	0.0010

CHAPTER V

SUMMARY, RECOMMENDATIONS, AND IMPLICATIONS

The purpose of this study was to investigate the relationship of selected sociopolitical factors and selected management performance measures among nutrition service management personnel in the Older Americans Act Nutrition Program for Older Americans (Title III-C). Eight hypotheses were postulated to determine if demographic and program characteristics affected management performance measures, attitudes toward aging, and political activities; and to determine if attitudes toward aging and political activities affected management performance measures.

This study, interdisciplinary in focus, centered on the Elderly Nutrition Program for Older Americans. Past studies of this program have indicated that management practices could be improved. Research at Oklahoma State University had reported on the use of performance measures such as effectiveness, productivity, quality, quality of work life, and innovation in studies of management practice. Sociopolitical variables, such as attitudes toward aging, and political activity, provide supporting data for managerial performance.

The sample utilized consisted of meal site managers randomly selected from Region VI of the Elderly Nutrition Program, and a census of dietitians employed with the same program. Data obtained from 153

questionnaires were analyzed using frequencies, percentages, t-test, chi square, ANOVA, and the Duncan Multiple Range Test.

Summary

Characteristics of the Respondent

Thirty-two percent of the respondents were 50 to 59 years of age, while 22 percent were 40 to 49, 16 percent were 30 to 39, and 15 percent were 60 to 69 years of age. Eight percent of the respondents were over 70 years of age and seven percent were 20 to 29 years of age. One hundred and forty-one respondents were female, and twelve were male. Sixty-nine percent of the sample were married, 29 percent were widowed, divorced or separated, and two percent had never married. One-third of the respondents had some college background, while seven percent had a bachelor's degree and seven percent had a graduate degree. Thirty-one percent were high school graduates, and eleven percent reported they have some high school education. Sixty responses were from Texas, 39 from Arkansas, 29 from Louisiana, 23 from Oklahoma, and two from New Mexico. Sixty-eight percent of the sample were Democrats, 11 percent were Independents, ten percent were Republicans and ten percent were not registered or would not indicate an affiliation. Nineteen dietitians responded to the survey, of which 13 were registered and licensed, and six were registered only. Sixty-four percent of the respondents were meal site managers, 26 percent were site or project directors, and ten percent were dietitians. Most respondents had worked in the Elderly Nutrition Program for more than two years. Forty-eight percent were employed full-time, 38 percent were employed more than 20 hours but less than 35 hours per week, and thirteen percent worked less than twenty

hours per week. Fifty-nine percent reported an annual salary between \$5,000 and \$14,999, while 26 percent reported a salary under \$5,000. Thirteen percent reported they earned between \$15,000 and \$24,999, and three respondents made a salary \$25,000 to \$34,999. Seventy-five percent of the respondents received paid vacation, paid holidays, and paid sick leave as benefits. Meal site managers were not likely to be members of a professional organization, while all but one of the dietitians belonged to the American Dietetic Association.

Characteristics of the Meal Sites

Thirty-nine percent of the sites were in a small city (2,500 to 24,999 people) while 36 percent were from a rural area, 14 percent from a medium-sized city (25 to 150,000 people), and 11 percent from large cities. Forty-seven percent of the sites were located in a community center, and 18 percent were located in a senior citizen center. More than two-thirds of the responding sites offered recreation, information and referral, outreach services, shopping assistance, and escort services, in addition to meal service. Ninety percent of the sample sites reporting offered transportation services to program participants. Eighty-one percent of the responding sites prepared food on-premise, and 64 percent utilized site staff only in preparation. Sixteen percent of the sites have food prepared by a contract caterer, 12 percent combine a caterer and site staff, and eight percent receive food prepared by another government sponsored program. One hundred sites utilize a cafeteria style of service, 13 percent use a restaurant style, and 11 percent combine cafeteria and restaurant style. Ninety-five percent of the sites served five days per week, and all responding sites served a

noon meal. Thirty-three percent of the responses indicated they served less than 50 meals per day, 37 percent served between 50 and 100, and 30 percent served more than 100 meals per day. Thirty-nine percent of the sites reported daily contributions between \$.26 and \$.50, while 33 percent reported contributions between \$.06 and \$.25, 13 percent had between \$.51 and \$.75 daily contribution, eight percent received \$.76 to \$1.00 daily and seven percent reported daily contributions of \$1.01 to \$1.52. Seventy percent of reporting sites had three or less full-time employees, while 23 percent had from four to seven full-time workers. Twenty-five percent of the sites employed a single part-time worker, 19 percent had three part-time employees, 18 percent had two part-time workers, 12 percent had five part-time workers, eight percent had four part-time workers, and 14 percent had more than six part-time employees. Forty-two percent of the responding sites had less than five volunteers, 39 percent had 6 to 10 volunteers, and 19 percent had more than ten volunteers.

Performance Measures

Performance measures were grouped into five separate categories: effectiveness, productivity, quality, quality of worklife, and innovation. Half of the twelve effectiveness measures were prepared by the foodservice manager alone more than fifty percent of the time. These activities; follow up on program dropouts, check plate waste, obtain participants evaluation of foodservice, be responsible for home-delivered meals prepared for participants unable to attend meal site, plan special events on featured days, and maintain system for utilization of leftovers, were always or usually performed in the meal sites.

Two effectiveness measures, compare actual foodservice performance to forecasted performance, and use a production schedule, were performed by the foodservice manager only, 40 percent of the time. Two effectiveness measures were performed by the dietitian alone 25 percent or more of the time. Conduct classes for participants on nutrition education and involved participants in menu planning were the activities most likely to be performed by dietitians. Two effectiveness measures, provide choice in meal items, and offer special meals (health related and/or religious-ethnic) to participants were not performed in 38 percent of the responses.

Six productivity measures were performed by the foodservice manager only more than fifty percent of the time. The activities, maintain daily attendance records, plan meal production according to daily participation, monitor turnover, absenteeism, and tardiness of employees, review and revise job descriptions annually, comparison shop for food and supplies, and conduct physical inventory of the storeroom were always or usually performed. A single measure, evaluate labor costs, was performed by the foodservice manager only 42 percent of the time, while 28 percent of those responding reported such activity as never being performed. A single activity, plan menus using standardized recipes, was performed by dietitians only fifty percent of the time, and three-fourths always performed this activity.

Three quality measures were performed by the foodservice manager only more than fifty percent of the time. These measures, conduct sanitation inspections, check temperatures of foods served, and use detailed specifications when purchasing food, equipment and supplies, were always or usually performed. A single quality measure, sponsor

participant advisory council on foodservice, was performed 42 percent of the time by the foodservice manager only, and 34 percent reported this activity as never being performed. Dietitians alone calculated dietary analysis 46 percent of the time, while 28 percent responded that this activity was never performed.

There were no groupings of similar responses with the three quality of worklife measures. Maintaining an employee suggestion system was performed by only the foodservice manager 51 percent of the time while 30 percent reported no one performing such activity. Conduct training sessions for employees was performed by foodservice managers only 48 percent of the time, by dietitians and foodservice managers 22 percent of the time, and by dietitians only 20 percent of the time. The use of written job satisfaction questionnaires were reported as performed by no one in 50 percent of the responses. The two innovation measures were similar in that the majority of respondents did not perform them. Involving patrons in testing recipes was not performed in 46 percent of the responding sites, and a computer was not used in 71 percent of the respondents.

Attitudes Toward Aging

Respondents to the survey had a favorable attitude toward aging. Four statements produced very positive attitudes toward aging. The sample generally agreed that old people were useful, effective, respected, and free to do things. Two statements resulted in slightly positive attitudes by respondents, old people are satisfied with life and are busy. One statement produced an indifferent response in the

sample. Respondents did not agree or disagree that old people looked to the future or looked to the past.

Political Activities

Respondents to this survey were politically active individuals best described as spectators. One activity, voting in elections, was performed nearly always by 92 percent of the respondents. There was support for issues of interest through financial or voluntary contributions by a large percentage of the respondents. Respondents indicated that signing petitions was sometimes done, and sometimes not done. Attending or testifying at hearings on political issues related to aging or nutrition, and meeting with legislators to discuss similar political issues, were activities rarely performed by respondents. Attending a political convention at any level of government had rarely or never been done by sixty-five percent of the respondents. Eighty-eight percent of those responding had never run for any political office.

Testing the Hypotheses

Chi square values were determined for the relationship between management performance measures and program level and activity. Sixteen significant differences ($P \leq .05$) were found. Meal sites serving more than fifty meals per day were associated with a high level of effectiveness, productivity, quality, quality of worklife, and total performance. Community centers and senior citizen centers tended to be associated with a high level of effectiveness, productivity, quality, and total performance. Cafeteria style service was associated with a high level of effectiveness and productivity. Meal sites employing two or three

part-time employees, and having three to six volunteers tended to be associated with a high degree of quality of worklife. T-tests were used to determine the effect of services available at the meal site on performance measures through calculation of mean differences ($P \leq .05$). Thirty significant differences were found. Presence of outreach services, escort services, and information and referral was indicative of a higher effectiveness, productivity, quality, quality of worklife, and total performance score than sites not offering these services. Sites offering counseling, shopping assistance, financial services, recreation, and any other service had higher effectiveness scores than sites not offering such services. Sites offering counseling, shopping assistance, financial services, and any other service had higher quality of worklife scores than sites not offering these services. Sites offering counseling, shopping assistance, and recreation had higher total performance scores than did sites not offering such services. A higher quality score was present in sites offering shopping assistance and recreation, and a high productivity score was present in sites offering recreation. The data obtained suggest that large, centrally located centers, which offer multiple services in addition to a nutrition program, exhibited the highest level of management performance. Sites of this size may have more resources available than those serving a smaller population. These sites may be able to take advantage of economies of scale in program operation. Based on the significant differences obtained from the data, H_0 was rejected.

1

Chi square values were determined for the relationship between management performance measures and demographic characteristics of respondents. Employment in itself was associated with high levels of

effectiveness, productivity, quality, and total performance. Residents of Arkansas, Louisiana, Oklahoma, and Texas tended to be associated with a high level of productivity and total performance. Married respondents were associated with a high level of quality and innovation. Respondents with a position title of meal site manager, previous work experience in the Elderly Nutrition Program, and not being a registered dietitian were associated with a high level of quality of worklife. Any previous employment in the program was associated with a high level of effectiveness. Dietitians who graduated from an internship were associated with a high level of quality. Females were more likely to be associated with lower levels of innovation than males. T-tests were used to determine the effect of benefits provided and organizational membership on performance measures through calculations of mean differences. Thirty significant differences ($P \leq .05$) were found. Respondents who had paid vacation, paid holidays, paid sick leave, medical plan, paid maternity leave, and pension plan had higher effectiveness scores than those not receiving these benefits. Those receiving paid vacation, paid holidays, and paid sick leave had higher quality of worklife scores than those not reporting such benefits. Respondents reporting they received paid vacation, paid holiday, paid sick leave, and accidental death and dismemberment insurance had higher total performance scores than respondents not receiving these benefits. Organizational membership indicated higher levels of effectiveness, productivity, quality, quality of worklife, and total performance than did not being a member. From the data obtained it appears that benefits received play an important role in management performance. Respondents who worked full-time and received benefits differed in their

performance from those employed less than full-time and receiving minimal benefits. Membership in a professional organization had a positive effect on management performance. Such organizations disseminate valuable information which may enable management to improve operations. These organizations also serve to bring professionals from similar fields together, again for the purpose of exchanging information. Management personnel with experience exhibited higher levels of performance than those without previous experience. Individuals lacking experience may also be deficient in managerial skills. Although only two innovation measures were utilized, data obtained reflects previous studies in that novel operational methods take considerable time for acceptance. For the reasons stated, H was rejected.

2

Analysis of variance was used to determine if any difference existed among the groups defined by the program characteristics and attitudes toward aging. A single significant difference ($P = 0.0219$) was found between recreation service offered at the meal site and attitude toward aging. The data suggest that presence of recreation services may imply a more positive attitude toward aging by nutrition management personnel. There were numerous categories in each program characteristic variable, yet only a single difference was obtained. This result suggests that program activity by itself was not a determinant of attitudes toward aging. In effect, this result indicates that program operations were not biased toward attitudes related to aging. The researcher failed to reject H .

3

Analysis of variance was used to determine if any differences existed among the groups defined by the demographic characteristics of the respondents and their attitudes toward aging. Respondents who were

not a registered dietitian, dietitians who were registered and licensed, respondents who received a uniform as a benefit, and those who were members of the Society for Nutrition Education, tended to have a more positive attitude toward aging. Of the 18 demographic variables only three produced significant differences. Respondents who were registered dietitians only have a less favorable attitude toward aging. It may be possible that these individuals consult with other age groups, and do not exhibit a bias toward any single group. There were 13 benefit categories, with only one producing a significant difference. The data suggests that individuals receiving a uniform as a benefit have a more positive attitude toward aging. The respondents as a whole exhibited positive attitudes toward aging, and it appears that this one observable difference among the benefits may be attributable to chance. Of the five organizations listed, only the Society for Nutrition Education (SNE) produced a significant difference. As a group, it was primarily the dietitians who were members of SNE. The variable of organizational membership itself produced minimal response and therefore may not be an accurate indicator. In theory, H_0 was rejected, however, the researcher⁴ postulates that demographic characteristics have no effect on attitudes toward aging.

Analysis of variance was used to determine if any differences existed among the groups defined by the program characteristics and political activities. Eight significant ($P \leq .05$) differences were found. Presence of outreach services, escort services, counseling, information and referral, shopping assistance, and recreation indicated a more positive political activity score than lack of such services. Sites serving 50 to 100 daily meals had respondents indicating a higher

political activity score than sites serving less than fifty. Sites with three or more volunteers had higher political activity scores than sites with less than three volunteers. From the data obtained, management personnel in large meal sites appear to have higher political activity scores. These individuals may have a greater awareness of aging and nutrition issues, and more opportunity to express their views. Individuals working in a smaller area may be less inclined to overtly express their political views. Based on the observable data, H_5 was rejected.

Analysis of variance was used to determine if any differences existed among the groups defined by the demographic characteristics and political activities. Nine significant differences ($P \leq .05$) were found. Paid vacation, paid holidays, paid sick leave, and paid maternity leave had a significant effect on political activities. Members of the Republican Party had significantly lower political activity scores than members of the other and no political parties. Respondents who were over 70 years of age, and had worked in their current position more than ten years had significantly higher political activity scores. Full time respondents had higher political activity scores than those working less than twenty hours per week. The results suggest that older management personnel with work experience in the program identified with program participants, and were more willing to become politically active. Full-time workers may be more committed to the program participants than part-time employees. Part-time employees may work in smaller sites and perhaps are under indirect pressure not to be actively involved in political activities. A number of non-respondents contacted by phone mentioned that the instrument measured sensitive areas, and

they were fearful of potential problems if their responses were known. In light of current national trends, it was surprising to observe the Republican Party less active within the survey population. Region VI traditionally was controlled by Democrats, and the majority of respondents reflected the party trend. Members of the Republican Party may exist in such small numbers that they are wary of overt political activities. Four of the 13 benefits positively affected political activity. These benefits were associated with full-time employment, and strengthen the position that these individuals may be more concerned with older persons' welfare such that they are more overt in expressing political views. Based on the significant differences obtained, H was rejected.

6

Chi square values were determined for the relationship between management performance measures and attitudes toward aging. Four significant differences ($P \leq .05$) were found. High levels of effectiveness, productivity, quality, and total performance tended to be associated with high or mid-range attitude score. It was noted that most respondents had a positive attitude toward aging. The high level attitude and performance scores may indicate that these individuals express their attitude through work performance. In effect, this may be indicative of job satisfaction, although the current study was not measuring such. Based on the observable differences, H was rejected.

7

Chi square values were determined for the relationship between management performance measures and political activities. Five significant differences ($P \leq .05$) were found. High levels of effectiveness, productivity, quality, quality of worklife, and total performance were associated with a high political activity score. The high political activity scores usually identified full-time workers, who often were

employed in large site operations. As with attitudes, the high political activity scores may reflect in work performance. These individuals identify with program participants, and such awareness leads to better on-the-job performance as well as more overt political activity. Based on the significant differences observed in the data, H_0 was rejected.

8

Recommendations

The most important recommendation the researcher can make after the initial study was completed relates to cooperation with program officials. While federally-sponsored programs have been previously studied, little has been written on the bureaucratic red tape one encounters conducting such research. The focal point of this study, the Elderly Nutrition Program, was composed of multiple organizational levels. While tacit approval for the research was obtained from regional administrators, the study focused on local service provider agencies. Each state within the region operates under unique guidelines, although there are some similarities between them. The researcher recommends that future research efforts establish primary contact with Area Agencies on Aging, as they are directly responsible for local service activity.

The instrument developed for this study requires additional testing. The attitude and political activity scales may be analyzed through use of factor analysis to determine acceptability. Reliability and validity of the instrument also needs to be determined. Each of the performance measures utilized in the study may be expanded to more accurately assess each performance criteria. The current study focused primarily on effectiveness, productivity, and quality. Performance criteria are related, and it remains essential to consider effectiveness

first, as this identifies organizational goals. Quality measures indicate how to accomplish the goals, and productivity explains how well the goals were accomplished. Innovation and quality of worklife indirectly affect each of the aforementioned criteria. The use of foodservice manager as a category in Part III of the instrument should be replaced by meal site manager. In Part IV, Program Characteristics, senior citizens center should be added to the statement pertaining to type of facility. The current study found that senior citizen center was entered in the "other" category, and enough were registered to suggest a separate line for senior citizen center. In Part V, Personal Data, there are two changes to consider. The National Association of Meal Programs (NAMP) should be included in the categories of professional organizations. This new organization (670 members), headquartered in Washington, D. C., comprises projects that operate elderly nutrition meal sites. The marital status statement should include separate lines for widowed, and divorced or separated, as respondents who were widowed emphasized this rather than be categorized according to widowed, divorced, or separated.

Results of this study suggest further research of management performance measures within the Elderly Nutrition Program. Initial communication with administrators in Oklahoma suggested a wider study within that state. The researcher suggests a replication of the current study utilizing a large random sample of meal site managers from Oklahoma. As a second phase of further study, the researcher proposes to replicate the current study in another region of the United States. Since the researcher has accepted a position at the University of Massachusetts, Region I (Maine, New Hampshire, Vermont, Massachusetts, Rhode

Island, and Connecticut) would be appropriate for investigation. Results from both regions may be compared to develop the data base for performance measures within the Elderly Nutrition Program. A long-range objective would be to incorporate findings from earlier studies in a national study of performance measures. Areas of management performance found lacking need to be closely examined, and if necessary, training modules proposed to assist in the improvement of performance.

Implications

The Elderly Nutrition Program was created to provide a nutritious meal to elderly individuals in need. Past research had focused on this overall goal and found it to be successfully met. Legislation at the national level called for the development of strategically located centers providing supportive social services in addition to nutrition. The current research indicates that smaller sites offer less service than larger sites. The current study also suggests that smaller sites have a lower level of management performance. This result suggests an emphasis on management training at the smaller sites. Such locations may be unable to attract qualified management personnel because of lack of resources such as pay, benefits, hours of work, and geographical location. In addition, such communities may be more concerned with simply providing the meal rather than an awareness of costs and administration.

While the study results indicate most nutrition program management personnel were measuring performance, there were some areas lacking in response. As a legislated program, certain operational areas were mandated by law. These include offering nutrition education, and

serving a meal equivalent to one-third of the Recommended Dietary Allowance (RDA). Neither of these were performed all of the time, as dictated by law. These two factors illustrate the scarcity of dietitians associated with the Elderly Nutrition Program. The researcher was only in contact with dietitians from three states, Arkansas, Oklahoma, and Texas, for completion of the current study. New Mexico has no dietitians or nutrition professionals associated with their program. Louisiana was unable to provide a listing of dietitians, nor was the state dietetic association able to assist. The list from Texas was incomplete but used since the population of dietitians was so restricted. These results suggest increased involvement by dietitians and nutrition professionals with the Elderly Nutrition Program. Dietitians may bring managerial experience to the program, and may assist in training site managers and staff. Dietitians also bring nutritional backgrounds which could assist in menu planning and nutrient analysis. A short-term suggestion would have extension personnel from state universities focus on the Elderly Nutrition Program in terms of nutritional analysis, menu planning, cost control, and administration. While the American Dietetic Association has a practice group, Dietitians in Health Care Operations, those individuals associated with the Elderly Nutrition Program are not identified. This suggests some organization of nutrition professionals associated with the program. In addition, it was noted that few meal site managers belong to any professional organization. Results indicate that professional organization membership had a positive effect on performance. This suggests that program administrators should consider such membership. The National Association of Meal Programs, a relatively new organization, was created solely for

operations involved in the Elderly Nutrition Program. The Dietary Managers Association could be an alternative organization for program management personnel.

Results from the current study support recent findings from the national study; a shift away from contract services, sites devoted exclusively to elderly programs, an increased number of meals per site, and in general, poor accountability. While performance was measured, in many cases it was the evaluative measures which were performed the least. This suggests additional management training in performance measurement. The basic process of performance measurement contains five steps:

- (1) decide what is to be measured
- (2) choose the unit of measurement
- (3) choose a time period of measurement
- (4) select the measurement technique
- (5) implement the measurement technique

The federal government has stabilized funding of the Elderly Nutrition Program, and future budgetary estimates probably will not match previous years increases. The current administration hypothesizes that increased funds for more meals may be raised through participant contributions. The current study found that contributions were generally lower than government expectations, suggesting that greater emphasis on management and cost control may be the route for performance improvement. Hiring practices may be adjusted to seek out individuals with previous managerial or foodservice experience. A brief attitudes toward aging scale could be incorporated into application forms to reveal potential bias. While the current study found favorable attitudes throughout the

sample, the attitude scale could serve as a screening tool. Increased training at site locations may serve to improve location performance, and may also assist in personnel development, providing additional opportunities for staff personnel. Regional offices may consider bulk purchasing to reduce costs and maintain uniform product quality. Inventories and purchasing may be incorporated into a computer program, as many National School Lunch Programs have done. With the cost of producing a meal rising, and federal commitment stabilizing, program officials must act now in order to maintain successful program operation. The Elderly Nutrition Program has a successful background, and improved management performance will enable the program to survive and serve many more elderly persons in the future.

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- Public Law 91-69. The Older Americans Act Amendments of 1969. 1969.
- Public Law 92-258. The Older Americans Act Amendments of 1972. 1972.
- Public Law 93-29. The Older Americans Comprehensive Services Amendments of 1973. 1973.
- Public Law 93-351. The Older Americans Act Amendments of 1974. 1974.
- Public Law 94-135. The Older Americans Act Amendments of 1975. 1975.
- Public Law 95-65. The Older Americans Act Amendments of 1977. 1977.
- Public Law 95-478. The Comprehensive Older Americans Act Amendments of 1978. 1978.
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APPENDIX A

LEGISLATIVE HISTORY OF THE OLDER AMERICANS ACT

- Public Law 89-73 The Older Americans Act
 Signed July 14, 1965
 79 STAT. 218
 House Report 89-145 to accompany H.R. 3708
 Education and Labor Committee
 Senate Report 89-247
 Labor and Public Welfare Committee
 Congressional Record Vol. 111(1965)
 House March 31, considered and passed
 Senate May 27, considered and passed, amended
 House July 6, considered and passed
- Public Law 90-42 The Older Americans Act Amendments of 1967
 Signed July , 1967
 81 STAT. 106
 House Report 90-367 to accompany H.R. 10730
 Education and Labor Committee
 Senate Report 90-
 Labor and Public Welfare Committee
 Congressional Record Vol. 113(1967)
 House June 19, considered and passed
 Senate June 28, considered and passed, amended
 House June 29, considered and passed
- Public Law 91-69 The Older Americans Act Amendments of 1969
 Signed September 17, 1969
 83 STAT. 108
 House Report 91-285 to accompany H.R. 11235
 Education and Labor Committee
 Senate Report 91-340
 Labor and Public Welfare Committee
 Congressional Record Vol. 115(1969)
 House June 16, considered and passed
 Senate August 13, considered and passed, amended
 House September 3, considered and passed
- Public Law 92-258 The Older Americans Act Amendments of 1972
 Signed March 22, 1972
 86 STAT. 88
 House Report 92-726 to accompany S. 1163
 Senate Report 92-575
 Congressional Record Vol. 117(1971)
 Senate November 30, considered and passed
 House December 1, considered

Congressional Record Vol. 118(1972)
 House February 7, considered and passed,
 amended
 Senate March 7, considered and passed

Public Law 93-29 Older Americans Comprehensive Service Amendments of
 1973

Signed May, 3, 1973
 87 STAT. 30
 House Report 93-43 to accompany H.R. 71
 Education and Labor Committee
 Senate Report 93-19 to accompany S. 50
 Labor and Public Welfare Committee
 Congressional Record Vol. 119(1973)
 Senate February 20, considered and passed
 House March 13, considered and passed, amended
 Senate April 18, considered and passed, amended
 House April 18, considered and passed
 Weekly Compilation of Presidential Documents
 Vol. 9 No. 18
 Presidential Statement May 4

Public Law 93-351 Older Americans Act Amendments of 1974

Signed July 12, 1974
 88 STAT. 357
 House Report 93-914 to accompany H.R. 11105
 Education and Labor Committee
 Senate Report 93-932 to accompany H. R. 11105
 Labor and Public Welfare Committee
 Congressional Record Vol. 120(1974)
 House March 19, considered and passed
 Senate June 19, considered and passed, amended
 House June 26, considered and passed, amended
 Senate June 27, considered and passed

Public Law 94-351 Older Americans Act Amendments of 1975

Signed November 28, 1975
 89 STAT. 713
 House Report 94-67
 Education and Labor Committee
 House Report 94-255
 Committee to Conference
 Senate Report 94-255
 Labor and Public Welfare Committee
 Congressional Record Vol. 121(1975)
 House April 8, considered and passed
 Senate June 26, considered and passed, amended
 House November 19, considered and passed
 Senate November 20, considered and passed

Weekly Compilation of Presidential Documents
Vol. 11 No. 48
Presidential Statement November 28

Public Law 95-65 Older Americans Act Amendments of 1977
Signed July 11, 1977
91 STAT. 269
House Report 95-267
Education and Labor Committee
Senate Report 95-149 accompanying S. 1170
Senate Report 95-150 accompanying S. 1321
Human Resources Committee
Congressional Record Vol. 123(1977)
House May 9, considered and passed
Senate May 17, considered and passed S. 1170
and S. 1321
Senate May 18, considered and passed, amended
House June 15, considered and passed, amended
Senate June 28, considered and passed

Public Law 95-478 Comprehensive Older Americans Act Amendments of 1978
Signed October 18, 1978
92 STAT. 1513
House Report 95-1150
Education and Labor Committee
House Report 95-1618
Committee of Conferences
Senate Report 95-855 accompanying S. 2850
Human Resources Committee
Senate Report 95-1236
Committee of Conferences
Congressional Record Vol. 124(1978)
House May 15, considered and passed
Senate July 24, considered and passed, amended
House October 4, considered and passed
Senate October 6, considered and passed
Weekly Compilation of Presidential Documents
Vol. 14 No. 42
Presidential Statement October 18

Public Law 97-115 Older Americans Act Amendments of 1981
Signed December 29, 1981
95 STAT. 1595
House Report 97-70 accompanying H.R. 3046
Education and Labor Committee
House Report 97-386
Committee of Conferences
Senate Report 97-159
Labor and Human Resources Committee
Congressional Record Vol. 127(1981)
Senate November 2, considered and passed

House November 20, considered and passed
H.R. 3046, amended S. 1086
Senate December 11, considered and passed
House December 16, considered and passed

APPENDIX B

NUTRITION PROGRAM APPROPRIATIONS

<u>Year</u>		<u>Appropriation (in millions)</u>
1966 - 1972	Not Authorized	
1973	Title VII, Nutrition Program	\$ 100
1974		100
1975		125
1976		125
1977		203.5
1978		250
1979	Title III, Part C Subpart 1, Congregate Nutrition	277
1980	Congregate Nutrition Subpart 2, Home-Delivered Meals	270 50
1981		295 55
1982		286.75 57.35
1983		258.15 48.14
1984	Estimated Total Appropriation	321.5 62
1985		336 68
1986		336 68

APPENDIX C
CORRESPONDENCE



Oklahoma State University

Department of Food, Nutrition and Institution Administration

425 HOME ECONOMICS WEST
STILLWATER, OKLAHOMA 74078
(405) 624-5039

April 8, 1985

Dear Elderly Nutrition Program Site Manager:

We are conducting an "Elderly Nutrition Program Management Performance Measures Study" and request your participation in this pilot study. Your response will enable us to further refine the survey instrument for the final sample survey. You are one of 50 persons invited to participate in this study.

This research project is exploratory in nature, with the anticipated goal of generating information about the Elderly Nutrition Program. We are not evaluating the program in any way, and information collected will be held in strict confidence. At no time during this study will you or the facility you serve be identified. Numbers on the survey instrument are for coding purposes, and serve to assist the researcher in tabulating data.

The survey should take approximately 15-20 minutes to complete. You are encouraged to make additional comments at any time, and please feel free to write these on the research instrument. The survey is designed so that when completed, simply fold it so that the return address faces out and staple it. Return postage has been furnished for your convenience. We would appreciate it if you could return the completed questionnaire by April 26, 1985. Thank you for your participation in this research project.

Sincerely,

Esther Winterfeldt

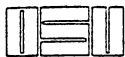
Esther Winterfeldt
Department Head and Advisor

Robert H. Bosselman

Robert H. Bosselman
Doctoral Candidate

EW:RHB:sdb





Oklahoma State University

Department of Food, Nutrition and Institution Administration

425 HOME ECONOMICS WEST
STILLWATER, OKLAHOMA 74078
(405) 624-5039

May 7, 1985

Dear Elderly Nutrition Program Site Manager:

We are conducting an "Elderly Nutrition Program Management Performance Measures Study" and request your participation in this study. A pilot study was previously conducted and the current instrument reflects input from fellow nutrition site managers. Your response will enable us to generate data about the Elderly Nutrition Program.

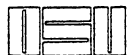
This research project is exploratory in nature, with the anticipated goal of generating information about the Elderly Nutrition Program. We are not evaluating the program in any way, and information collected will be held in strict confidence. At no time during this study will you or the facility you serve be identified. Numbers on the survey instrument are for coding purposes, and serve to assist the researcher in tabulating data.

The survey should take approximately 15-20 minutes to complete. You are encouraged to make additional comments at any time, and please feel free to write these on the research instrument. The survey is designed so that when completed, simply fold it so that the return address faces out, then staple it. Return postage has been furnished for your convenience. We would appreciate it if you could return the completed questionnaire by May 30, 1985. Thank you for your participation in this research project.

Robert H. Bosselman
Doctoral Candidate

Sincerely,

Esther Winterfeldt, Ph.D.
Regents Professor and Head
Department of Food, Nutrition and
Institution Administration



Oklahoma State University

Department of Food, Nutrition and Institution Administration

425 HOME ECONOMICS WEST
STILLWATER, OKLAHOMA 74078
(405) 624-5039

Dear Elderly Nutrition Program Dietitian:

We are conducting an "Elderly Nutrition Program Management Performance Measures Study" and request your participation in this study. The current instrument has gone through several revisions, with input from dietitians in academia and the Elderly Nutrition Program. Your response will enable us to generate data about the Elderly Nutrition Program.

This research project is exploratory in nature, with the anticipated goal of generating information about the Elderly Nutrition Program. We are not evaluating the program in any way, and information collected will be held in strict confidence. At no time during this study will you or the facility you serve be identified. Numbers on the survey instrument are for coding purposes, and serve to assist the researcher in tabulating data.

The survey should take approximately 15-20 minutes to complete. You are encouraged to make additional comments at any time, and please feel free to write these on the research instrument. The survey is designed so that when completed, simply fold it so that the return address faces out, then staple it. Return postage has been furnished for you convenience. We would appreciate it if you could return the completed questionnaire by June 14, 1985. Thank you for your participation in this research project.

Sincerely,

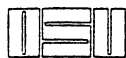
Esther Winterfeldt

Esther Winterfeldt, Ph.D., R.D.
Department Head and Advisor

Robert H. Bosselman

Robert H. Bosselman, M.S., R.D.
Doctoral Candidate





Oklahoma State University

Department of Food, Nutrition and Institution Administration

425 HOME ECONOMICS WEST
STILLWATER, OKLAHOMA 74078
(405) 624-5039

May 31, 1985

Dear Meal Site Manager:

The "Elderly Nutrition Program Performance Measures Study" has been favorably received by the sample of meal sites chosen for this exploratory study. This exploratory study should generate information about the Program, however, more data is necessary for this study to be complete.

We are not evaluating the Program in any way, and information collected will be held in strict confidence. At no time during this study will you or the facility you serve be identified. Numbers on the survey instrument are for coding purposes, and serve to assist the researcher in tabulating data.

The survey should take approximately 15-20 minutes to complete. You are encouraged to make additional comments at any time, and please feel free to write these on the research instrument. The survey is designed so that when completed, simply fold it so that the return address faces out, then staple it. Return postage has been furnished for your convenience. We would appreciate it if you could return the completed questionnaire by June 14, 1985.

Thank you for your participation in this important research project.

Sincerely,

Robert H. Bosselman
Doctoral Candidate

Esther Winterfeldt, Ph.D.
Regents Professor and Head
Department of Food, Nutrition
and Institution Administration

APPENDIX D

INSTRUMENT DEVELOPMENT

I. ATTITUDES TOWARD AGING

Directions: For each of the following statements circle the number that would most nearly represent your own attitude toward old people in general. Note that the numbers extend from one extreme description to its opposite kind of description.

Old people in general are:

- | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|------------------------|
| 1. Free to do things | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Not free to do things |
| 2. Useless | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Useful |
| 3. Looking to the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Looking to the past |
| 4. Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Effective |
| 5. Satisfied with life | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dissatisfied with life |
| 6. Respected | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disregarded |
| 7. Busy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Inactive |

II. POLITICAL ACTIVITIES

Directions: Please circle the response which best applies to the statement at the left.

Within the last five years ALWAYS USUALLY SOMETIMES RARELY NEVER
you have:

- | | | | | | |
|---|---|---|---|---|---|
| 1. voted in elections regularly. | 1 | 2 | 3 | 4 | 5 |
| 2. used a political button or sticker. | 1 | 2 | 3 | 4 | 5 |
| 3. attended a political convention at the county, state or national level. | 1 | 2 | 3 | 4 | 5 |
| 4. supported a political issue through monetary or volunteer contributions. | 1 | 2 | 3 | 4 | 5 |
| 5. joined a visual means of protest or support for a political issue. | 1 | 2 | 3 | 4 | 5 |

6.	attended or testified at hearings on a political issue.	1	2	3	4	5
7.	supported a candidate or party through monetary or volunteer contributions.	1	2	3	4	5
8.	met with a legislator to discuss a political issue.	1	2	3	4	5
9.	signed a petition related to a political issue.	1	2	3	4	5
10.	sent a letter or telegram to a legislator or government agency related to a political issue.	1	2	3	4	5
11.	telephoned a legislator, government agency, or fellow citizens, to discuss a political issue.	1	2	3	4	5
12.	written a letter or article for publication related to a political issue.	1	2	3	4	5
13.	been appointed to a commission or ad hoc group studying a political issue.	1	2	3	4	5
14.	ran for local, county, state or national office.	1	2	3	4	5
15.	given assistance in managing a political campaign.	1	2	3	4	5

III. PERFORMANCE MEASURES

This section lists activities which may be performed by the Dietitian (D) and/or Foodservice Manager (FSM) in elderly nutrition facilities.

DIRECTIONS

1. Read each activity and check the appropriate column (1-4) which best describes WHO performs the activity.

2. In column 5, enter the frequency with which the activity is performed, according to the key given below:

1 = ALWAYS
2 = USUALLY
3 = SOMETIMES
4 = RARELY
5 = NEVER

EXAMPLE:

1. Files Menus
2. Prepares Purchasing Specifications
3. Calculates Dietary Analysis

(1)	(2)	(3)	(4)	(5)
D	FSM	BOTH	NEITHER	
	X			1
		X		2
X				2

ACTIVITIES:

1. Conduct classes for participants on nutrition education.
2. Follow-up on program drop-outs.
3. Check plate waste.
4. Obtain participants evaluation of foodservice.
5. Involve participants in menu planning.
6. Provide choice in meal items.
7. Sponsor participant advisory council on foodservice.
8. Daily attendance records maintained.

[illegible]

8. Benefits provided (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> 1. meals | <input type="checkbox"/> 8. group life insurance |
| <input type="checkbox"/> 2. uniform | <input type="checkbox"/> 9. accidental death and dis- |
| <input type="checkbox"/> 3. paid vacation | <input type="checkbox"/> memberment insurance |
| <input type="checkbox"/> 4. paid holidays | <input type="checkbox"/> 10. paid maternity leave |
| <input type="checkbox"/> 5. paid sick leave | <input type="checkbox"/> 11. pension plan |
| <input type="checkbox"/> 6. medical plan | <input type="checkbox"/> 12. education assistance |
| <input type="checkbox"/> 7. dental plan | <input type="checkbox"/> 13. other (please specify) |

9. Professional organization membership (check all that apply):

- | |
|---|
| <input type="checkbox"/> 1. American Dietetic Association |
| <input type="checkbox"/> 2. Society for Nutrition Education |
| <input type="checkbox"/> 3. American Home Economics Association |
| <input type="checkbox"/> 4. Dietary Managers Association |
| <input type="checkbox"/> 5. Other (please specify) |

10. Dietetic Registration Status:

- | | |
|---|--|
| <input type="checkbox"/> 1. Registered and Licensed | <input type="checkbox"/> 2. Not Registered |
| <input type="checkbox"/> 3. Registered | |

11. Route to Registration:

- | | |
|--|--|
| <input type="checkbox"/> 1. internship | <input type="checkbox"/> 4. three year pre-planned |
| <input type="checkbox"/> 2. coordinated under- | <input type="checkbox"/> work experience |
| <input type="checkbox"/> graduate program | <input type="checkbox"/> 5. graduate degree plus |
| <input type="checkbox"/> 3. traineeship | <input type="checkbox"/> work experience |

12. Education:

- | | |
|--|---|
| <input type="checkbox"/> 1. some high school | <input type="checkbox"/> 5. some graduate study |
| <input type="checkbox"/> 2. high school graduate | <input type="checkbox"/> 6. masters degree |
| <input type="checkbox"/> 3. some college | <input type="checkbox"/> (major: _____) |
| <input type="checkbox"/> 4. bachelor's degree | <input type="checkbox"/> 7. doctorate |
| <input type="checkbox"/> (major: _____) | <input type="checkbox"/> (major: _____) |

13. State of residence: _____

14. Size of community where you reside:

- | |
|---|
| <input type="checkbox"/> 1. large city (> 150,000 people) |
| <input type="checkbox"/> 2. medium city (25,000 - 150,000 people) |
| <input type="checkbox"/> 3. small city (2,500 - 24,999 people) |
| <input type="checkbox"/> 4. rural area (< 2,500 people) |

15. Political party affiliation:

- | | |
|---|--|
| <input type="checkbox"/> 1. Democrat | <input type="checkbox"/> 3. Republican |
| <input type="checkbox"/> 2. Independent | <input type="checkbox"/> 4. other (please specify) |

16. Gender:

_____ 1. female _____ 2. male

17. Race:

_____ 1. American Indian _____ 4. Oriental or Asian
_____ 2. Black or Afro-American _____ 5. White or Caucasian
_____ 3. Spanish American (Hispanic)

18. Marital status:

_____ 1. single _____ 3. widowed or divorced
_____ 2. married

19. Age group:

_____ 1. 20 - 29 _____ 4. 50 - 59
_____ 2. 30 - 39 _____ 5. 60 - 69
_____ 3. 40 - 49 _____ 6. over 70

I. ATTITUDES TOWARD AGING

Directions: For each of the following statements circle the number that would most nearly represent your own attitude toward old people in general. Note that the numbers extend from one kind of description.

Old people in general are:

- | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|------------------------|
| 1. Free to do things | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Not free to do things |
| 2. Useless | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Useful |
| 3. Looking to the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Looking to the past |
| 4. Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Effective |
| 5. Satisfied with life | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dissatisfied with life |
| 6. Respected | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disregarded |
| 7. Busy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Inactive |
-

II. POLITICAL ACTIVITIES

Directions: Please circle the response which best applies to the statement at the left.

Within the last five years you have:

- | | Always | Usually | Sometimes | Rarely | Never |
|---|--------|---------|-----------|--------|-------|
| 1. voted in elections regularly. | 1 | 2 | 3 | 4 | 5 |
| 2. attended a political convention at the county, state or national level. | 1 | 2 | 3 | 4 | 5 |
| 3. supported a political issue through monetary or volunteer contributions. | 1 | 2 | 3 | 4 | 5 |
| 4. attended or testified at hearings on a political issue. | 1 | 2 | 3 | 4 | 5 |
| 5. met with a legislator to discuss a political issue. | 1 | 2 | 3 | 4 | 5 |
| 6. signed a petition related to a political issue. | 1 | 2 | 3 | 4 | 5 |

7. ~~sent a letter or telegram to a legislator or~~ 1 2 3 4 5
~~government agency related to a political issue.~~
8. ran for local, county, state or national office. 1 2 3 4 5
state or national office.

III. PERFORMANCE MEASURES

This section lists activities which may be performed by the DIETITIAN (D) and/or FOODSERVICE MANAGER (FSM) in elderly nutrition facilities.

DIRECTIONS

1. Read each activity and check (X) the appropriate column (1-4) which best describes WHO performs the activity.
2. In the last column, circle the frequency with which the activity is performed, according to the following key.

1 = ALWAYS
2 = USUALLY
3 = SOMETIMES
4 = RARELY
5 = NEVER

ACTIVITIES:

	D	FSM	BOTH	NONE	FREQUENCY
1. Conduct classes for participants on nutrition education.					1 2 3 4 5
2. Follow-up on program drop-outs.					1 2 3 4 5
3. Check plate waste.					1 2 3 4 5
4. Obtain participants evaluation of foodservice.					1 2 3 4 5
5. Involve participants in menu planning.					1 2 3 4 5
6. Provide choice in meal items.					1 2 3 4 5
7. Sponsor participant advisory council on food-service.					1 2 3 4 5

25. Maintain employee sug- gestion system.						
26. Evaluate labor costs periodically.						
27. Compare actual food- service performance to forecasted performance.						
28. Use production schedule.						
29. Maintain system for utilization of leftovers.						

IV. PROGRAM CHARACTERISTICS

Directions: Please check or fill in the appropriate answers. Please answer all questions.

1. Size of community where meal site is located:

- ☐ 1. Large city (≥ 150,000 people)
- ☐ 2. Medium city (25,000 - 150,000 people)
- ☐ 3. Small city (2,500 - 24,999 people)
- ☐ 4. Rural area (< 2,500 people)

2. Type of neighborhood where meal site is located:

- ☐ 1. all residential
- ☐ 2. residential with some business
- ☐ 3. even mix of residential and business
- ☐ 4. business with some residential
- ☐ 5. all business
- ☐ 6. rural

3. Type of facility where meal site is located:

- ☐ 1. community center
- ☐ 2. church
- ☐ 3. school
- ☐ 4. apartment complex
- ☐ 5. storefront
- ☐ 6. office building
- ☐ 7. other (specify) _____

4. Other services available at meal site:

- ☐ 1. outreach services
- ☐ 2. escort services
- ☐ 3. counseling
- ☐ 4. information and referral
- ☐ 5. shopping assistance
- ☐ 6. financial services
- ☐ 7. recreation
- ☐ 8. other (specify) _____

5. Transportation services provided for participants:

 1. yes 2. no

6. Type of foodservice system:

_____ 1. conventional-menu items prepared from basic ingredients on day they will be served and held in hot or cold state until served.

2. assembly/serve-primarily commercially prepared food purchased in ready-to-serve form.

3. cool/chill-menu items prepared one or more days in advance and held in chilled state until served.

4. cook/freeze-menu items prepared one or more days in advance and held in frozen state until served.

7. Meal service method:

☐ 1. cafeteria style ☐ 4. family style
☐ 2. restaurant style ☐ 5. combination style
☐ 3. buffet style

8. Meal preparation:

[illegible]

9. Method of meal preparation:

 1. by site staff 4. by other govern-
 2. by contract caterer ment sponsored
 3. combination of staff program
 and caterer

10. Days of meal service:

 1. 7 days a week 3. 3 days a week
 2. 5 days a week 4. less than 3 days
 a week

11. Meal served at:

 1. lunch 2. dinner 3. both

12. Average number of meals served daily: _____

13. Average daily contribution per participant: _____

14. Number of paid employees:

_____ 1. full-time _____ 2. part-time

15. Average number of daily volunteers: _____

V. PERSONAL DATA

Directions: Please check or fill in the appropriate response. Please answer all questions.

1. Position title:

_____ 1. Meal site manager _____ 2. dietitian
_____ 3. other (please specify) _____

2. Time in current position:

_____ 1. less than 1 year _____ 4. 5 - 10 years
_____ 2. 1 - 2 years _____ 5. more than 10 years
_____ 3. 2 - 5 years

3. Previous employment in the Nutrition Program for Older Americans:

_____ 1. yes _____ 2. no

4. If answer to number 3 was yes, please specify position(s) & number of years service: _____

5. Position status:

_____ 1. full time (35 hours or more)
_____ 2. at least 20 hours, but less than 35 hours
_____ 3. less than 20 hours

6. If answer to number 5 was (2) or (3), please specify other responsibilities (position, title, hours): _____

7. Salary:

<u>Full-time</u>	<u>Part-time</u>
_____ 1.	_____ 2. under \$4,999
_____ 3.	_____ 4. \$5,000 - 14,999
_____ 5.	_____ 6. \$15,000 - 24,999
_____ 7.	_____ 8. \$25,000 - 34,999
_____ 9.	_____ 10. over \$35,000

8. Daily attendance records maintained.
9. Home-delivered meals prepared for participants unable to attend meal site.
10. Plan menus using standardized recipes.
11. Special meals (health related and/or religious-ethnic) offered to participants.
12. Plan special events on featured days.
13. Meal production planned according to daily participation.
14. Conduct regular sanitation inspections.
15. ~~Conduct regular training sessions for employees.~~
16. ~~Monitor turnover, absenteeism, and tardiness of employees.~~
17. Check temperatures of foods served.
18. Review and revise job descriptions.
19. Comparison shop for food and supplies.
20. Evaluate energy costs.
21. Conduct physical inventory of storeroom.
22. ~~Involve patrons in testing recipes.~~
23. Use detailed specifications when purchasing food, equipment and supplies.

[illegible]

24. Use computer in operation.					1	2	3	4	5
25. Maintain employee suggestion system.					1	2	3	4	5
26. Evaluate labor costs periodically.					1	2	3	4	5
27. Compare actual food-service performance to forecasted performance.					1	2	3	4	5
28. Use production schedule.					1	2	3	4	5
29. Maintain system for utilization of leftovers.					1	2	3	4	5
30. Calculates dietary analysis.					1	2	3	4	5

IV. PROGRAM CHARACTERISTICS

Directions: Please check (X) or fill in the appropriate answers. Please answer all questions.

1. Size of community where meal site is located:

- ☐ 1. Large city (> 150,000 people)
- ☐ 2. Medium city (25,000 - 150,000 people)
- ☐ 3. Small city (2,500 - 24,999 people)
- ☐ 4. Rural area (< 2,500 people)

2. Type of facility where meal site is located:

- ☐ 1. community center
- ☐ 2. church
- ☐ 3. school
- ☐ 4. apartment complex
- ☐ 5. storefront
- ☐ 6. office building
- ☐ 7. other (specify) _____

3. Other services available at meal site:

- ☐ 1. outreach services
- ☐ 2. escort services
- ☐ 3. counseling
- ☐ 4. information and referral
- ☐ 5. shopping assistance
- ☐ 6. financial services
- ☐ 7. recreation
- ☐ 8. other (specify) _____

4. Transportation services provided for participants:

☐ 1. yes ☐ 2. no

5. Type of foodservice system:

<input type="checkbox"/> 1. on site	<input type="checkbox"/> 2. at other location
<input type="checkbox"/> 1.1 by site staff	<input type="checkbox"/> 2.1 by site staff
<input type="checkbox"/> 1.2 by contract caterer	<input type="checkbox"/> 2.2 by contract caterer
<input type="checkbox"/> 1.3 by combination staff and caterer	<input type="checkbox"/> 2.3 by combination staff and caterer
<input type="checkbox"/> 1.4 by other government sponsored program	<input type="checkbox"/> 2.4 by other government sponsored program

6. Meal service method:

<input type="checkbox"/> 1. cafeteria style	<input type="checkbox"/> 4. family style
<input type="checkbox"/> 2. restaurant style	<input type="checkbox"/> 5. combination style (please specify)
<input type="checkbox"/> 3. buffet style	

7. Number of days of meal service: *per week*

<input type="checkbox"/> 1. less than 3	<input type="checkbox"/> 3. 5
<input type="checkbox"/> 2. 3	<input type="checkbox"/> 4. 7

8. Meal served at:

☐ 1. lunch ☐ 2. dinner ☐ 3. both

9. Average number of meals served daily: _____

10. Average daily ^{per participant} contribution per participant: _____

11. Number of paid employees:

☐ 1. full-time ☐ 2. part-time

12. Average number of daily volunteer workers: _____

V. PERSONAL DATA

Directions: Please check (X) or fill in the appropriate response.
Please answer all questions.

1. Your position title:

- ☐ 1. Meal site manager ☐ 2. Dietitian
☐ 3. other (please specify) _____

2. Time spent in current position:

- ☐ 1. less than 1 year ☐ 4. 5 - 10 years
☐ 2. 1 - 2 years ☐ 5. more than 10 years
☐ 3. 2 - 5 years

3. Have you had previous employment in the Nutrition Program for Older Americans:

- ☐ 1. yes ☐ 2. no

4. If answer to number 3 was yes, please specify number of years of service _____ and position _____5. ^{Current} Position status:

- ☐ 1. full time (35 hours or more)
☐ 2. at least 20 hours, but less than 35 hours
☐ 3. less than 20 hours

6. If answer to number 5 was (2) or (3), please specify other responsibilities (position, title, hours): _____

7. Salary:

- | <u>Full-time</u> | <u>Part-time</u> |
|-----------------------------|---|
| <input type="checkbox"/> 1. | <input type="checkbox"/> 2. under \$4,999 |
| <input type="checkbox"/> 3. | <input type="checkbox"/> 4. \$5,000 - 14,999 |
| <input type="checkbox"/> 5. | <input type="checkbox"/> 6. \$15,000 - 24,999 |
| <input type="checkbox"/> 7. | <input type="checkbox"/> 8. \$25,000 - 34,999 |
| <input type="checkbox"/> 9. | <input type="checkbox"/> 10. over \$35,000 |

8. Benefits provided (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> 1. meals | <input type="checkbox"/> 8. group life insurance |
| <input type="checkbox"/> 2. uniform | <input type="checkbox"/> 9. accidental death and dis-
memberment insurance |
| <input type="checkbox"/> 3. paid vacation | <input type="checkbox"/> 10. paid maternity leave |
| <input type="checkbox"/> 4. paid holidays | <input type="checkbox"/> 11. pension plan |
| <input type="checkbox"/> 5. paid sick leave | <input type="checkbox"/> 12. education assistance |
| <input type="checkbox"/> 6. medical plan | <input type="checkbox"/> 13. other (please specify) _____ |
| <input type="checkbox"/> 7. dental plan | |

9. Professional organization membership (check all that apply):

- ☐ 1. American Dietetic Association
☐ 2. Society for Nutrition Education
☐ 3. American Home Economics Association
☐ 4. Dietary Managers Association (formerly "HEIERS")
☐ 5. Other (please specify) _____

ELDERLY NUTRITION PROGRAM
PERFORMANCE MEASURES STUDY

Please complete all sections, then staple and return as soon as possible.

I. ATTITUDES TOWARD AGING

Directions: For each of the following statements circle the number that would most nearly represent your own attitude toward old people in general. Note that the numbers extend from one extreme description to its opposite kind of description.

Old people in general are:

- | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|------------------------|
| 1. Free to do things | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Not free to do things |
| 2. Useless | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Useful |
| 3. Looking to the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Looking to the past |
| 4. Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Effective |
| 5. Satisfied with life | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dissatisfied with life |
| 6. Respected | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Disregarded |
| 7. Busy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Inactive |
-

II. POLITICAL ACTIVITIES

Directions: Please circle the response which best applies to the statement at the left.

Within the last five years you have:

- | | At all
times | Frequently | Sometimes | Rarely | Never |
|--|-----------------|------------|-----------|--------|-------|
| 1. voted in elections. | 1 | 2 | 3 | 4 | 5 |
| 2. attended political conventions at the county, state or national level. | 1 | 2 | 3 | 4 | 5 |
| 3. supported political issues related to aging or nutrition through monetary or volunteer contributions. | 1 | 2 | 3 | 4 | 5 |
| 4. attended or testified at hearings on political issues related to aging or nutrition. | 1 | 2 | 3 | 4 | 5 |
| 5. met with legislators to discuss political issues related to aging or nutrition. | 1 | 2 | 3 | 4 | 5 |
| 6. signed petitions related to aging or nutrition political issues. | 1 | 2 | 3 | 4 | 5 |
| 7. ran for local, county, state or national office. | 1 | 2 | 3 | 4 | 5 |

III. PERFORMANCE MEASURES

This section lists activities which may be performed by the DIETITIAN (D) and/or FOODSERVICE MANAGER (FSM) in elderly nutrition facilities. Please answer all questions.

DIRECTIONS

1. Read each activity and check (X) the appropriate column which best describes WHO performs the activity.
2. In the last column, circle the frequency with which the activity is performed, according to the following key: 1 = ALWAYS, 2 = USUALLY, 3 = SOMETIMES, 4 = RARELY, 5 = NEVER.

ACTIVITIES:

	D	FSM	BOTH	NO ONE	FREQUENCY
1. Conduct classes for participants on nutrition education.					1 2 3 4 5
2. Follow-up on program drop-outs.					1 2 3 4 5
3. Check plate waste.					1 2 3 4 5
4. Obtain participants evaluation of foodservice.					1 2 3 4 5
5. Involve participants in menu planning.					1 2 3 4 5
6. Provide choice in meal items.					1 2 3 4 5
7. Sponsor participant advisory council on foodservice.					1 2 3 4 5
8. Daily attendance records maintained.					1 2 3 4 5
9. Home-delivered meals prepared for participants unable to attend meal site.					1 2 3 4 5
10. Plan menus using standardized recipes.					1 2 3 4 5
11. Special meals (health related and/or religious-ethnic) offered to participants.					1 2 3 4 5
12. Evaluate labor costs.					1 2 3 4 5

13. Plan special events on featured days.
14. Meal production planned according to daily participation.
15. Conduct sanitation inspections.
16. Conduct training sessions for employees.
17. Monitor turnover, absenteeism, and tardiness of employees.
18. Check temperatures of foods served.
19. Review and revise job descriptions annually.
20. Comparison shop for food and supplies.
21. Use written job satisfaction questionnaires.
22. Conduct physical inventory of storeroom.
23. Involve patrons in testing recipes.
24. Use detailed specifications when purchasing food, equipment and supplies.
25. Use computer in operation.
26. Maintain employee suggestion system.
27. Compare actual foodservice performance to forecasted performance.
28. Use production schedule.
29. Maintain system for utilization of leftovers.
30. Calculate dietary analysis.

[illegible]

IV. PROGRAM CHARACTERISTICS

Directions: Please check (X) or fill in the appropriate answers. Please answer all questions.

1. Size of community where meal site is located:

- ☐ 1. Large city (> 150,000 people)
☐ 2. Medium city (25,000 - 150,000 people)
☐ 3. Small city (2,500 - 24,999 people)
☐ 4. Rural area (< 2,500 people)

2. Type of facility where meal site is located:

- | | |
|---|--|
| <input type="checkbox"/> 1. community center | <input type="checkbox"/> 5. storefront |
| <input type="checkbox"/> 2. church | <input type="checkbox"/> 6. office building |
| <input type="checkbox"/> 3. school | <input type="checkbox"/> 7. other (please specify) |
| <input type="checkbox"/> 4. apartment complex | _____ |

3. Other services available at meal site:

- | | |
|--|--|
| <input type="checkbox"/> 1. outreach services | <input type="checkbox"/> 5. shopping assistance |
| <input type="checkbox"/> 2. escort services | <input type="checkbox"/> 6. financial services |
| <input type="checkbox"/> 3. counseling | <input type="checkbox"/> 7. recreation |
| <input type="checkbox"/> 4. information and referral | <input type="checkbox"/> 8. other (please specify) |
| | _____ |

4. Transportation services provided for participants:

- ☐ 1. yes ☐ 2. no

5. Type of foodservice system:

- | | |
|--|--|
| <input type="checkbox"/> 1. on site | <input type="checkbox"/> 2. at other location |
| <input type="checkbox"/> 1.1 by site staff | <input type="checkbox"/> 2.1 by site staff |
| <input type="checkbox"/> 1.2 by contract caterer | <input type="checkbox"/> 2.2 by contract caterer |
| <input type="checkbox"/> 1.3 by combination staff and caterer | <input type="checkbox"/> 2.3 by combination staff and caterer |
| <input type="checkbox"/> 1.4 by other government sponsored program | <input type="checkbox"/> 2.4 by other government sponsored program |

6. Meal service method:

- | | |
|--|---|
| <input type="checkbox"/> 1. cafeteria style | <input type="checkbox"/> 4. family style |
| <input type="checkbox"/> 2. restaurant style | <input type="checkbox"/> 5. combination style |
| <input type="checkbox"/> 3. buffet style | (please specify) |
| | _____ |

7. Number of days of meal service per week:

- | | |
|---|---------------------------------|
| <input type="checkbox"/> 1. less than 3 | <input type="checkbox"/> 3. 5-6 |
| <input type="checkbox"/> 2. 3-4 | <input type="checkbox"/> 4. 7 |

8. Meal served at:

1. breakfast 3. dinner
 2. lunch 4. more than one meal
 (please specify)

9. Average number of meals served daily: -

- _____ 1. breakfast _____ 3. dinner
_____ 2. lunch

10. Average daily financial contribution per participant:

- _____ 1. breakfast _____ 3. dinner
_____ 2. lunch

11. Number of paid employees:

1. full-time 2. part-time

12. Average number of daily volunteer workers: _____

V. PERSONAL DATA

Directions: Please check (X) or fill in the appropriate response.
Please answer all questions.

1. Your current position title:

- _____ 1. Meal site manager _____ 2. Dietitian
_____ 3. other (please specify) _____

2. Time spent in current position:

- ☐ 1. less than 1 year ☐ 4. 6 - 10 years
☐ 2. 1 - 2 years ☐ 5. more than 10 years
☐ 3. 3 - 5 years

3. Have you had previous employment in the Nutrition Program for Older Americans:

- _____ 1. yes _____ 2. no

4. If answer to number 3 was yes, please specify number of years of service _____ and position _____

5. Your current position status:

- ☐ 1. full time (35 hours or more)
☐ 2. at least 20 hours, but less than 35 hours
☐ 3. less than 20 hours

6. If answer to number 5 was (2) or (3), please specify other responsibilities (position, title, hours): _____

7. Salary of your current position:

<u>If Part-time</u>		<u>If Full-time</u>
_____	under \$4,999	_____
_____	\$ 5,000 - 14,999	_____
_____	\$15,000 - 24,999	_____
_____	\$25,000 - 34,999	_____
_____	over \$35,000	_____

8. Benefits provided (check all that apply):

_____ 1. meals	_____ 8. group life insurance
_____ 2. uniform	_____ 9. accidental death and dis-
_____ 3. paid vacation	_____ memberment insurance
_____ 4. paid holidays	_____ 10. paid maternity leave
_____ 5. paid sick leave	_____ 11. pension plan
_____ 6. medical plan	_____ 12. education assistance
_____ 7. dental plan	_____ 13. other (please specify)

9. Professional organization membership (check all that apply):

_____ 1. American Dietetic Association
 _____ 2. Society for Nutrition Education
 _____ 3. American Home Economics Association
 _____ 4. Dietary Managers Association (formerly HEIFSS)
 _____ 5. Other (please specify) _____

10. Dietetic Registration Status:

_____ 1. Registered and Licensed _____ 2. Not Registered
 _____ 3. Registered

11. Route to Registration:

_____ 1. internship	_____ 4. three year pre-planned
_____ 2. coordinated under-	_____ work experience
_____ graduate program	_____ 5. graduate degree plus
_____ 3. traineeship	_____ work experience

12. Education:

_____ 1. some high school	_____ 5. some graduate study
_____ 2. high school graduate	_____ 6. masters degree
_____ 3. some college	_____ (major: _____)
_____ 4. bachelor's degree	_____ 7. doctorate
_____ (major: _____)	_____ (major: _____)

13. State of residence: _____

14. Political party affiliation:

- | | |
|---|--|
| <input type="checkbox"/> 1. Democrat | <input type="checkbox"/> 3. Republican |
| <input type="checkbox"/> 2. Independent | <input type="checkbox"/> 4. other (please specify) |
-

15. Gender:

- | | |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> 1. female | <input type="checkbox"/> 2. male |
|------------------------------------|----------------------------------|

16. Race:

- | | |
|---|--|
| <input type="checkbox"/> 1. American Indian | <input type="checkbox"/> 4. Oriental or Asian |
| <input type="checkbox"/> 2. Black or Afro-American | <input type="checkbox"/> 5. White or Caucasian |
| <input type="checkbox"/> 3. Spanish American (Hispanic) | |

17. Marital status:

- | | |
|--|---|
| <input type="checkbox"/> 1. never been married | <input type="checkbox"/> 3. widowed, divorced, or separated |
| <input type="checkbox"/> 2. married | |

18. Age group:

- | | |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> 1. 20 - 29 | <input type="checkbox"/> 4. 50 - 59 |
| <input type="checkbox"/> 2. 30 - 39 | <input type="checkbox"/> 5. 60 - 69 |
| <input type="checkbox"/> 3. 40 - 49 | <input type="checkbox"/> 6. over 70 |

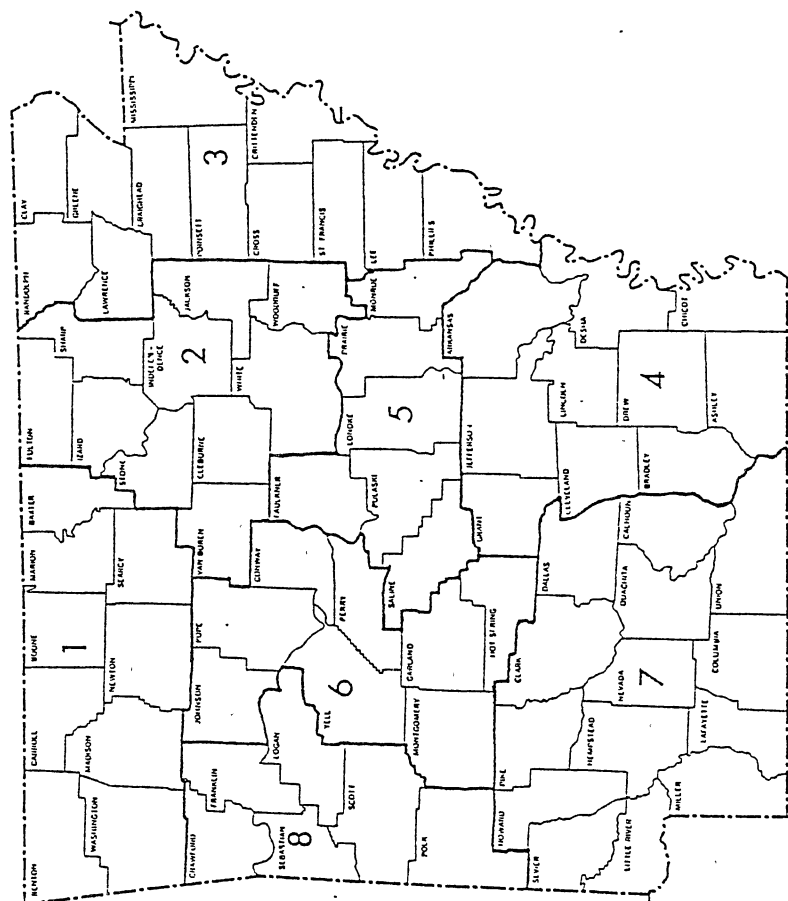
Thank You for your Participation

Please be sure you have answered all questions

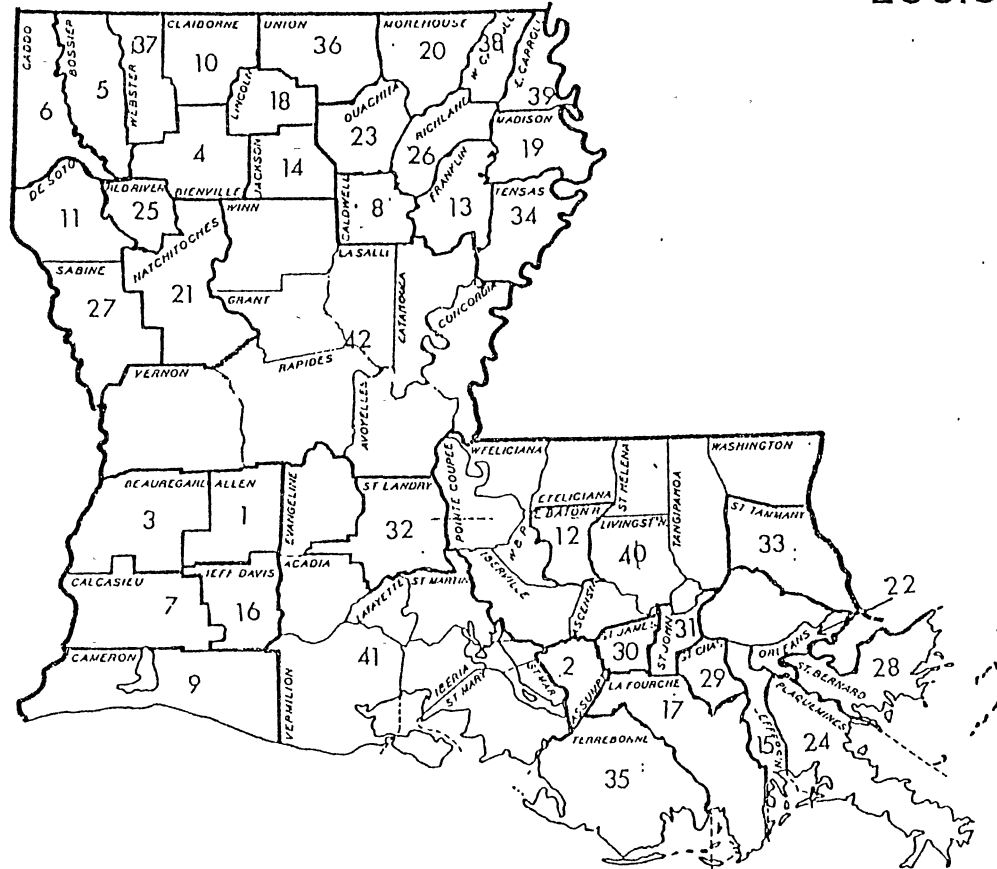
APPENDIX E

STATES IN SURVEY SHOWING
AREA AGENCIES ON AGING

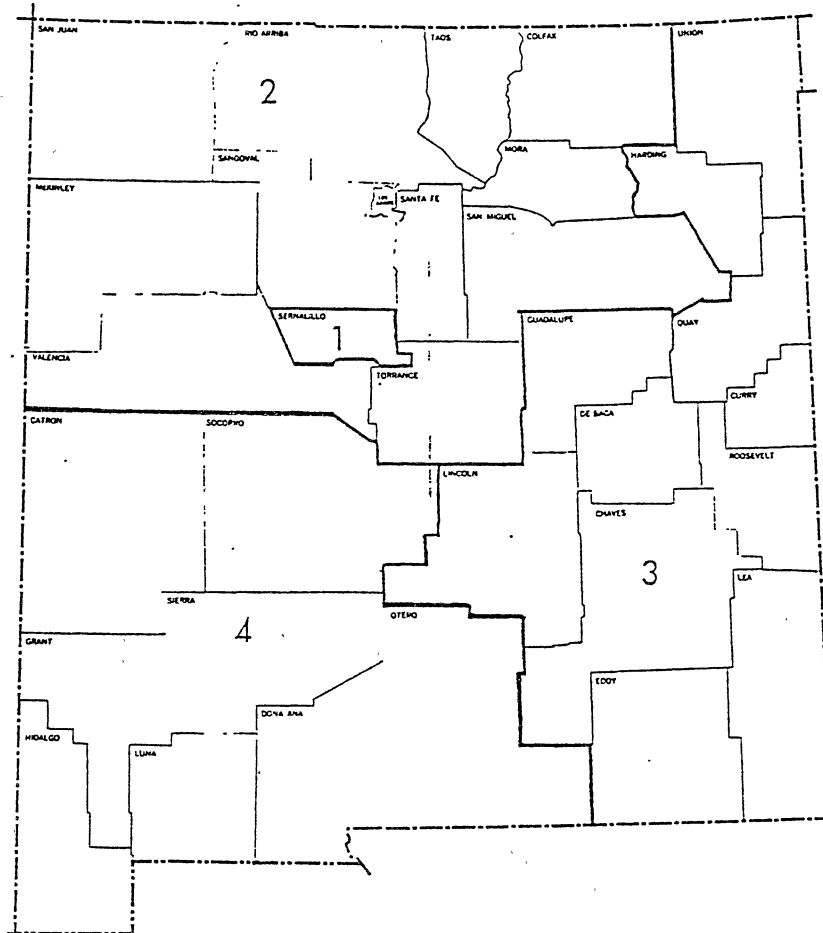
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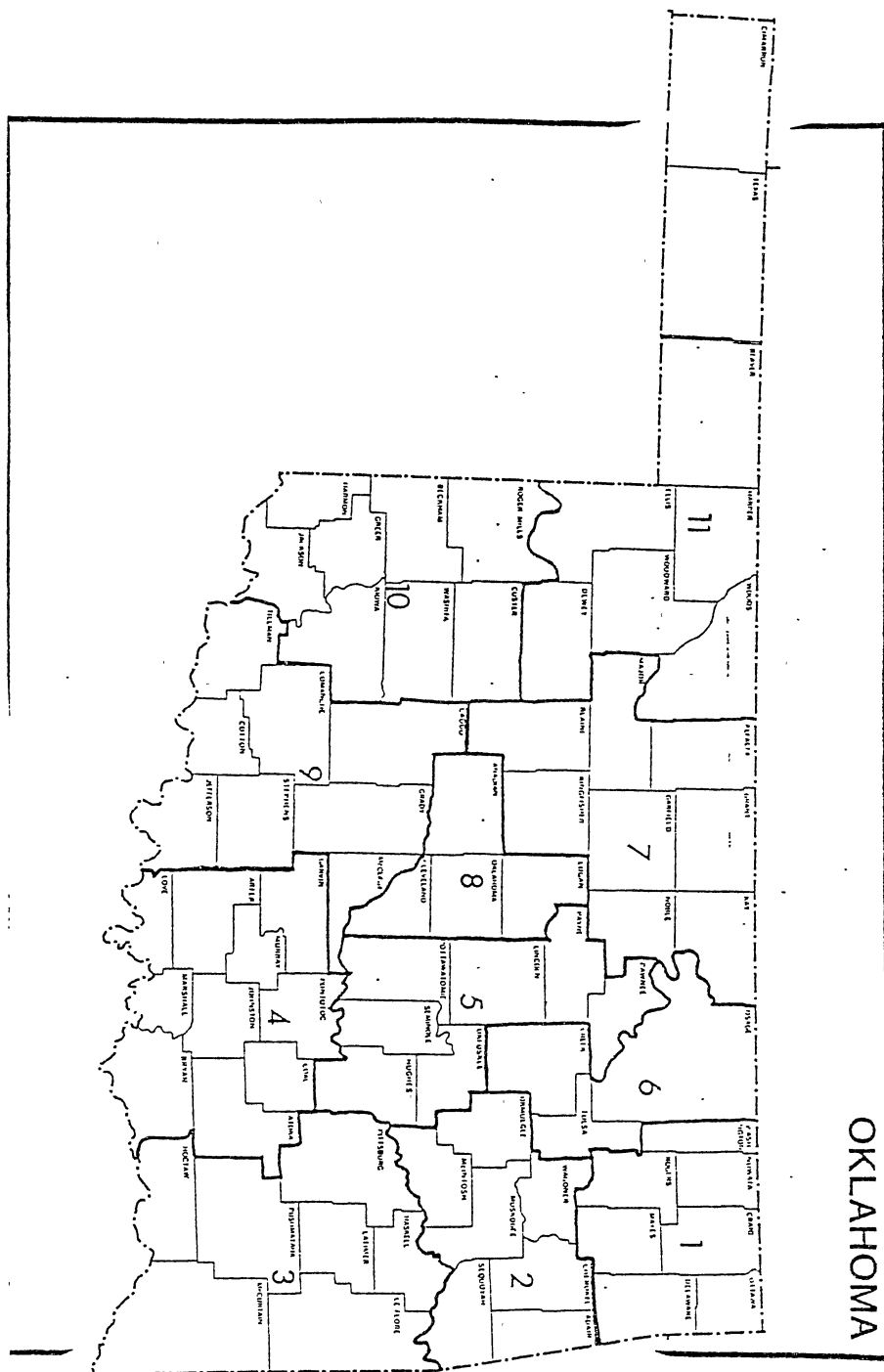


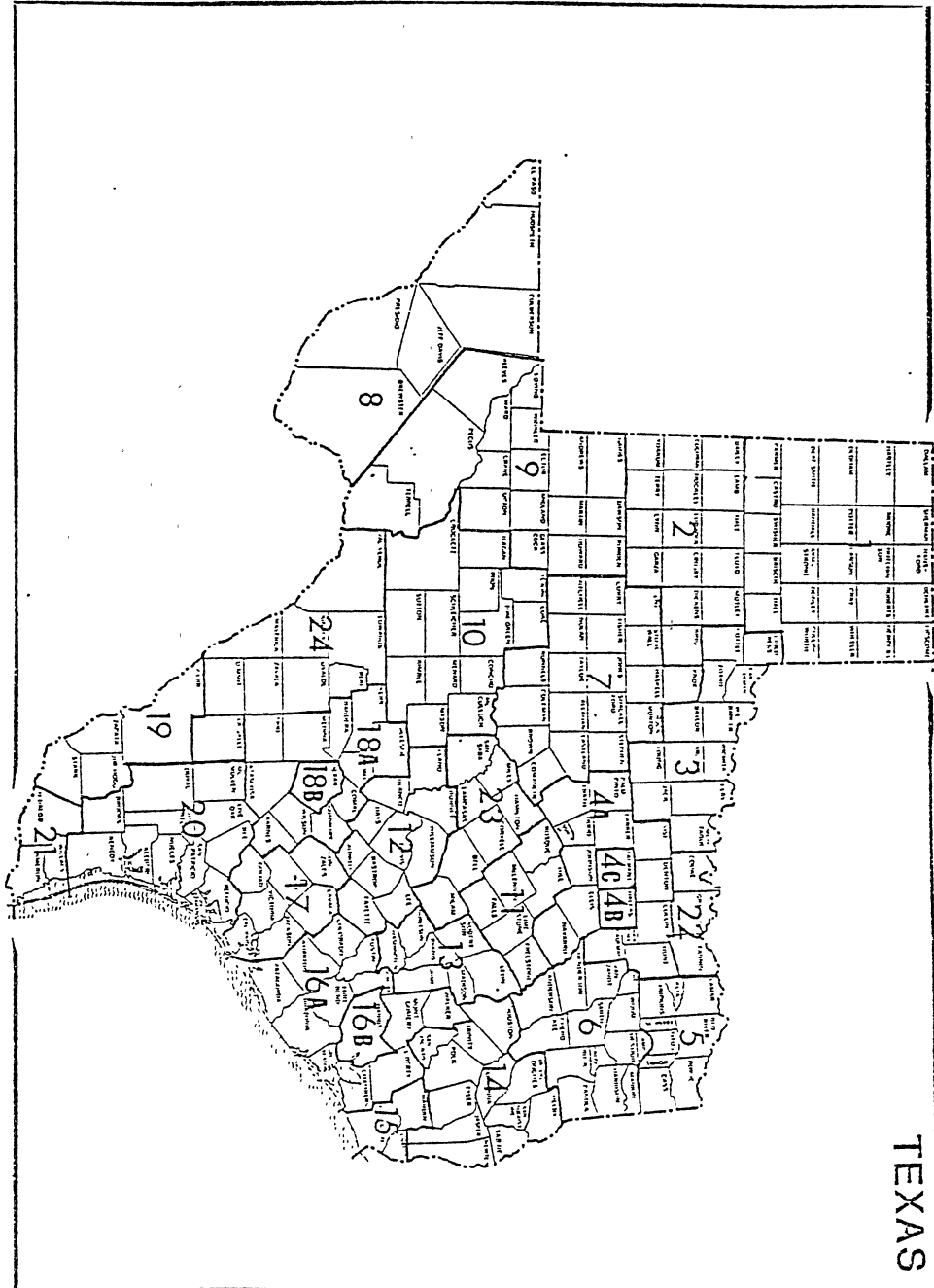
LOUISIANA



NEW MEXICO



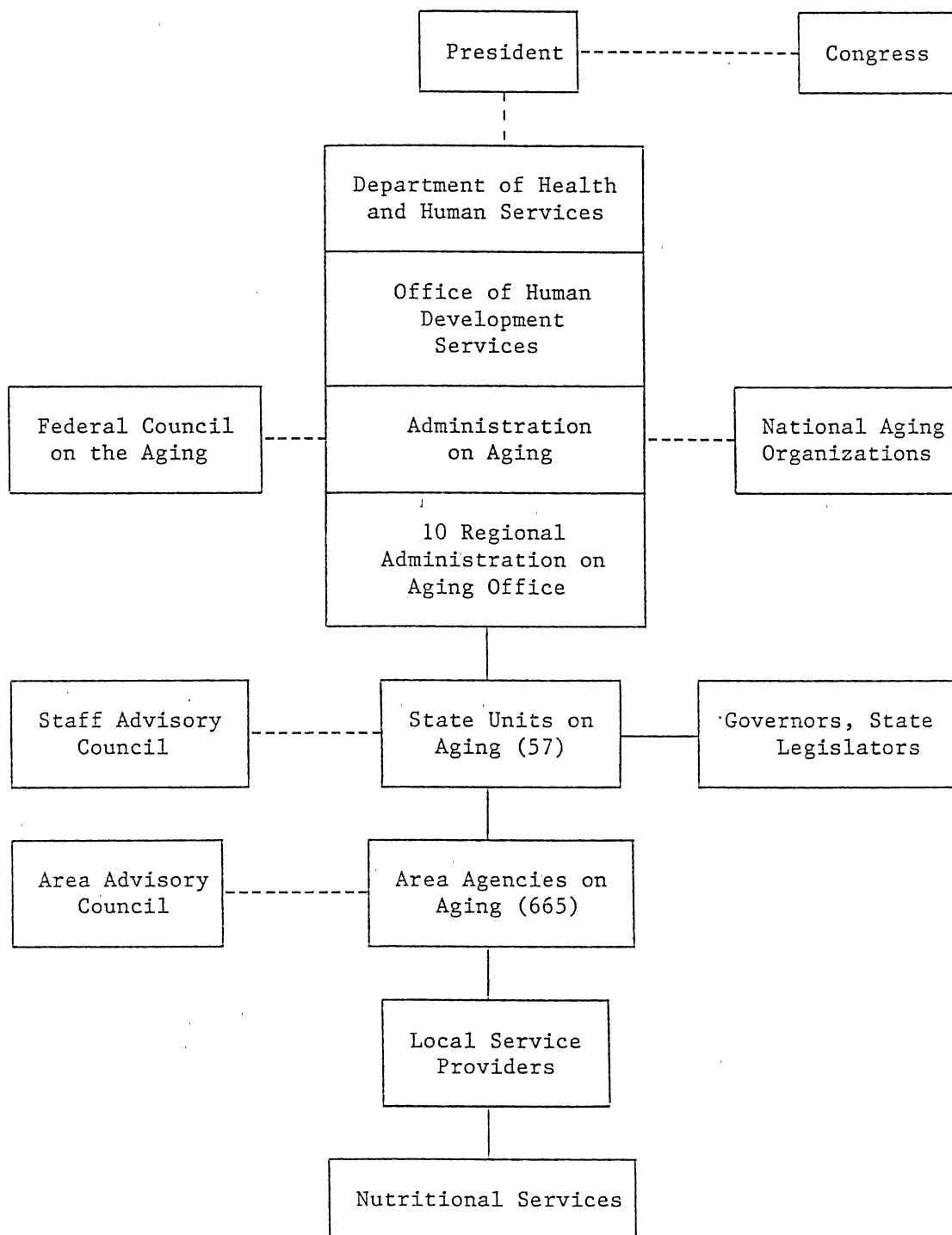




APPENDIX F

AGING NETWORK

THE AGING NETWORK



APPENDIX G

CHI SQUARE TABLES SHOWING PERFORMANCE
MEASURES BY PROGRAM CHARACTERISTICS

TABLE XX
CHI SQUARE TABLE SHOWING EFFECTIVENESS BY MEALS

NUMBER OF MEALS SERVED**	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	8	5.06	14	8.86	41	25.95
2	0	0	10	6.33	42	26.58
3	1	0.63	4	2.53	38	24.05

$$\chi^2 = 13.737 \quad df = 4 \quad \text{PROB} = 0.0082$$

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score > 24 but ≤ 36 then effectiveness = 2
 If effectiveness score > 36 then effectiveness = 3

** Number of Meals Served: If meals served ≤ 50 then meals = 1
 If meals served > 50 but ≤ 100 then meals = 2
 If meals served > 100 then meals = 3

TABLE XXI
CHI SQUARE TABLE SHOWING PRODUCTIVITY BY MEALS

NUMBER OF MEALS SERVED**	LEVEL OF PRODUCTIVITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	10	6.33	14	8.86	39	24.68
2	1	0.63	3	1.90	48	30.38
3	1	0.63	1	0.63	41	25.95

$$\chi^2 = 25.240 \quad df = 4 \quad \text{PROB} = 0.0001$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

** Number of Meals Served: If meals served ≤ 50 then meals = 1
 If meals served > 50 but ≤ 100 then meals = 2
 If meals served > 100 then meals = 3

TABLE XXII
CHI SQUARE TABLE SHOWING QUALITY BY MEALS

NUMBER OF MEALS SERVED**	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	11	6.96	13	8.23	39	24.68
2	0	0	7	4.43	45	28.48
3	10	0.63	2	1.27	40	25.32

$$\chi^2 = 22.090 \quad df = 4 \quad \text{PROB} = 0.0002$$

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score > 10 but ≤ 15 then quality = 2
 If quality score > 15 then quality = 3

** Number of Meals Served: If meals served ≤ 50 then meals = 1
 If meals served > 50 but ≤ 100 then meals = 2
 If meals served > 100 then meals = 3

TABLE XXIII
CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY MEALS

NUMBER OF MEALS SERVED**	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	23	14.56	9	5.70	31	19.62
2	6	3.80	12	7.59	34	21.52
3	3	1.90	16	10.13	24	15.19

$$\chi^2 = 20.976 \quad df = 4 \quad \text{PROB} = 0.0003$$

* Level of Quality of Worklife: If QWL score ≤ 6 then QWL = 1
 If QWL score > 6 but ≤ 9 then QWL = 2
 If QWL score > 9 then QWL = 3

** Number of Meals Served: If meals served ≤ 50 then meals = 1
 If meals served > 50 but ≤ 100 then meals = 2
 If meals served > 100 then meals = 3

TABLE XXIV
CHI SQUARE TABLE SHOWING INNOVATION BY MEALS

NUMBER OF MEALS SERVED**	LEVEL OF INNOVATION*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	48	30.38	8	5.06	7	4.43
2	36	22.78	11	6.96	5	3.16
3	21	13.29	17	10.76	5	3.16

$\chi^2 = 11.236$ $df = 4$ $PROB = 0.0240$

* Level of Innovation: If innovation score ≤ 4 then innovation = 1
 If innovation score >4 but ≤ 6 then innovation = 2
 If innovation score >6 then innovation = 3

** Number of Meals Served: If meals served ≤ 50 then meals = 1
 If meals served >50 but ≤ 100 then meals = 2
 If meals served >100 then meals = 3

TABLE XXV

CHI SQUARE TABLE SHOWING TOTAL PERFORMANCE BY MEALS

NUMBER OF MEALS SERVED**	LEVEL OF TOTAL PERFORMANCE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	9	5.70	15	9.49	39	24.68
2	1	0.63	4	2.53	47	29.75
3	1	0.63	2	1.27	40	25.32

$$\chi^2 = 21.167 \quad df = 4 \quad \text{PROB} = 0.0003$$

* Level of Total Performance: If total score ≤ 60 then total = 1
 If total score > 60 but ≤ 90 then total = 2
 If total score > 90 then total = 3

** Number of Meals Served: If meals served ≤ 50 then meals = 1
 If meals served > 50 but ≤ 100 then meals = 2
 If meals served > 100 then meals = 3

TABLE XXVI
CHI SQUARE TABLE SHOWING EFFECTIVENESS BY TYPE OF FACILITY

TYPE OF FACILITY	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Community Center	1	0.65	12	7.84	59	38.56
Senior Citizens Center	0	0	0	0	28	18.30
Church	0	0	2	1.31	5	3.27
School	1	0.65	4	2.61	4	2.61
Apartment Complex	1	0.65	1	0.65	2	1.31
Storefront	0	0	1	0.65	1	0.65
Office Building	1	0.65	0	0	2	1.31
Other	0	0	8	5.23	20	13.07

$\chi^2 = 39.58$ $df = 14$ PROB 0.001

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score > 24 but ≤ 36 then effectiveness = 2
 If effectiveness score > 36 then effectiveness = 3

TABLE XXVII

CHI SQUARE TABLE SHOWING PRODUCTIVITY BY TYPE OF FACILITY

TYPE OF FACILITY	LEVEL OF PRODUCTIVITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Community Center	4	2.61	8	5.23	60	39.22
Senior Citizens Center	0	0	0	0	28	18.30
Church	0	0	4	2.61	3	1.96
School	0	0	2	1.31	7	4.58
Apartment Complex	2	1.31	0	0	2	1.31
Storefront	0	0	0	0	2	1.31
Office Building	1	0.65	0	0	2	1.31
Other	0	0	4	2.61	24	15.68

$$\chi^2 = 47.9248 \quad df = 14 \quad \text{PROB} \quad 0.001$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

TABLE XXVIII
CHI SQUARE TABLE SHOWING QUALITY BY TYPE OF FACILITY

TYPE OF FACILITY	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Community Center	3	1.96	14	9.15	55	35.95
Senior Citizens Center	0	0	0	0	28	18.30
Church	2	1.31	0	0	5	3.27
School	0	0	2	1.31	7	4.58
Apartment Complex	0	0	3	1.96	1	0.65
Storefront	0	0	0	0	2	1.31
Office Building	1	0.65	0	0	2	1.31
Other	0	0	4	2.61	24	15.68

$\chi^2 = 40.46$ $df = 14$ PROB 0.001

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score > 10 but ≤ 15 then quality = 2
 If quality score > 15 then quality = 3

TABLE XXIX

CHI SQUARE TABLE SHOWING TOTAL PERFORMANCE BY TYPE OF FACILITY

TYPE OF FACILITY	LEVEL OF TOTAL PERFORMANCE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Community Center	3	1.96	11	7.19	58	37.91
Senior Citizens Center	0	0	0	0	28	18.30
Church	0	0	3	1.96	4	2.61
School	0	0	4	2.61	5	3.27
Apartment Complex	2	0.65	0	0	2	1.31
Storefront	0	0	0	0	2	1.31
Office Building	1	0.65	0	0	2	1.31
Other	0	0	3	1.96	25	16.33

$$\chi^2 = 49.61 \quad df = 14 \quad \text{PROB} \quad 0.001$$

* Level of Total Performance: If total score ≤ 60 then total = 1
 If total score > 60 but ≤ 90 then total = 2
 If total score > 90 then total = 3

TABLE XXX

CHI SQUARE TABLE SHOWING EFFECTIVENESS BY MEAL SERVICE METHOD

MEAL SERVICE METHOD	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Cafeteria Style	2	1.32	19	12.5	79	51.97
Restaurant Style	2	1.32	0	0	18	11.84
Buffet Style	0	0	3	1.97	7	4.61
Family Style	0	0	3	1.97	2	1.32
Combination Style	0	0	3	1.97	14	9.21
$\chi^2 = 15.645$ $df = 8$ $PROB = 0.0478$						

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score >24 but ≤ 36 then effectiveness = 2
 If effectiveness score >36 then effectiveness = 3

TABLE XXXI

CHI SQUARE TABLE SHOWING PRODUCTIVITY BY MEAL SERVICE METHOD

MEAL SERVICE METHOD	LEVEL OF PRODUCTIVITY *					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Cafeteria Style	5	3.29	6	3.95	89	58.55
Restaurant Style	1	0.66	5	3.29	14	9.21
Buffet Style	0	0	3	1.97	7	4.61
Family Style	0	0	3	1.97	2	1.32
Combination Style	1	0.66	0	0	16	10.53

$$\chi^2 = 24.679 \quad df = 8 \quad \text{PROB} = 0.00018$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

TABLE XXXII

CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY PART-TIME EMPLOYEES

NUMBER OF PART-TIME EMPLOYEES	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	10	8.00	7	5.60	13	10.40
2	1	0.08	3	2.40	19	15.20
3	5	4.00	3	2.40	16	12.80
3	3	2.40	19	15.20	26	20.80
$\chi^2 = 21.890$ $df = 6$ $PROB = 0.0013$						

* Level of Quality of Worklife: If QWL score ≤ 6 then QWL = 1
 If QWL score > 6 but ≤ 9 then QWL = 2
 If QWL score > 9 then QWL = 3

TABLE XXXIII
CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY VOLUNTEERS

NUMBER OF VOLUNTEERS**	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	20	12.66	10	6.33	32	20.25
2	6	3.80	8	5.06	21	13.29
3	6	3.80	19	12.03	36	22.78

$$\chi^2 = 11.222 \quad df = 4 \quad \text{PROB} = 0.0242$$

* Level of Quality of Worklife: If QWL score ≤ 6 then QWL = 1
 If QWL score > 6 but ≤ 9 then QWL = 2
 If QWL score > 9 then QWL = 3

** Number of Volunteers: If volunteers ≤ 3 then volunteers = 1
 If volunteers > 3 but ≤ 6 then volunteers = 2
 If volunteers > 6 then volunteers = 3

TABLE XXXIV

CHI SQUARE TABLE SHOWING INNOVATION BY NUMBER OF DAYS OF MEAL SERVICE

DAYS OF SERVICE	LEVEL OF QUALITY OF INNOVATION*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Less than 3	0	0	0	0	1	0.65
3 - 4	3	1.96	3	1.96	0	0
5 - 6	97	63.40	32	20.92	16	10.46
7	0	0	1	0.65	0	0

 $\chi^2 = 14.105$ df = 6 PROB = 0.0285

* Level of Innovation: If innovation score ≤ 4 then innovation = 1
 If innovation score > 4 but ≤ 6 then innovation = 2
 If innovation score > 6 then innovation = 3

APPENDIX H

T TESTS SHOWING PERFORMANCE MEASURES
BY SERVICES

TABLE XXXV
T-TEST PROCEDURE FOR EFFECTIVENESS: SERVICES

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Outreach Services:				
Yes	133	2.82	0.42	0.0004
No	25	2.12	0.83	
Escort Services:				
Yes	97	2.80	0.69	0.0155
No	61	2.56	0.44	
Counseling:				
Yes	90	2.83	0.37	0.0033
No	68	2.54	0.72	
Information and Referral:				
Yes	138	2.80	0.43	0.0013
No	20	2.05	0.88	
Shopping Assistance:				
Yes	110	2.81	0.42	0.0071
No	48	2.48	0.77	
Financial Services:				
Yes	46	2.83	0.38	0.0447
No	112	2.66	0.62	
Recreation:				
Yes	139	2.78	0.46	0.0075
No	19	2.16	0.90	
Other:				
Yes	53	2.83	0.43	0.0319
No	105	2.65	0.62	

TABLE XXXVI
T-TEST PROCEDURE FOR PRODUCTIVITY: SERVICES

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Outreach Services:				
Yes	133	2.81	0.49	0.0093
No	25	2.32	0.85	
Escort Services:				
Yes	97	2.84	0.44	0.0074
No	61	2.56	0.74	
Information and Referral:				
Yes	138	2.80	0.92	0.0283
No	20	2.30	0.50	
Recreation:				
Yes	139	2.79	0.50	0.0443
No	19	2.32	0.95	

TABLE XXXVII
T-TEST PROCEDURE FOR QUALITY: SERVICES

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Outreach Services:				
Yes	133	2.80	0.47	0.0033
No	25	2.20	0.91	
Escort Services:				
Yes	97	2.84	0.45	0.0027
No	61	2.51	0.74	
Information and Referral:				
Yes	138	2.78	0.51	0.0199
No	20	2.25	0.91	
Shopping Assistance:				
Yes	110	2.80	0.48	0.0155
No	48	2.50	0.77	
Recreation:				
Yes	139	2.76	0.52	0.0576
No	19	2.32	0.95	

TABLE XXXVIII
T-TEST PROCEDURE FOR QUALITY OF WORKLIFE: SERVICES

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Outreach Services:				
Yes	133	2.50	0.72	0.0001
No	25	1.64	0.81	
Escort Services:				
Yes	97	2.56	0.69	0.0002
No	61	2.05	0.86	
Counseling:				
Yes	90	2.52	0.72	0.0041
No	68	2.15	0.85	
Information and Referral:				
Yes	138	2.46	0.77	0.0002
No	20	1.70	0.73	
Shopping Assistance:				
Yes	110	2.47	0.75	0.0117
No	48	2.10	0.86	
Financial Services:				
Yes	46	2.57	0.72	0.0305
No	112	2.28	0.82	
Other:				
Yes	53	2.64	0.65	0.0007
No	105	2.22	0.83	

TABLE XXXIX
T-TEST PROCEDURE FOR TOTAL PERFORMANCE: SERVICES

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Outreach Services:				
Yes	133	2.83	0.47	0.0009
No	25	2.20	0.82	
Escort Services:				
Yes	97	2.86	0.41	0.0020
No	61	2.52	0.74	
Counseling:				
Yes	90	2.81	0.45	0.0521
No	68	2.62	0.71	
Information and Referral:				
Yes	138	2.81	0.48	0.0034
No	20	2.15	0.88	
Shopping Assistance:				
Yes	110	2.82	0.47	0.0130
No	48	2.52	0.74	
Recreation:				
Yes	139	2.79	0.49	0.0254
No	19	2.26	0.93	

APPENDIX I

CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES
BY DEMOGRAPHIC CHARACTERISTICS

TABLE XL
CHI SQUARE TABLE SHOWING EFFECTIVENESS BY POSITION STATUS

POSITION STATUS	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Full Time (> = 35 hours)	1	0.67	7	4.70	64	42.95
At least 20 hours, but 35	3	2.01	16	10.74	38	25.50
Less than 20 hours	0	0	4	2.68	16	10.74

$$\chi^2 = 10.34 \quad df = 4 \quad \text{PROB} = 0.0351$$

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score > 24 but ≤ 36 then effectiveness = 2
 If effectiveness score > 36 then effectiveness = 3

TABLE XLI

CHI SQUARE TABLE SHOWING PRODUCTIVITY BY POSITION STATUS

POSITION STATUS	LEVEL OF PRODUCTIVITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Full Time (\geq 35 hours)	2	1.34	4	2.68	66	44.30
At least 20 hours, but 35	5	3.36	12	8.05	40	26.85
Less than 20 hours	0	0	1	0.67	19	12.75

$$\chi^2 = 13.138 \quad df = 4 \quad \text{PROB} = 0.0106$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

TABLE XLII
CHI SQUARE TABLE SHOWING QUALITY BY POSITION STATUS

POSITION STATUS	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Full Time (≥ = 35 hours)	2	1.34	5	3.36	65	43.62
At least 20 hours, but 35	5	3.36	14	9.40	38	25.50
Less than 20 hours	0	0	3	2.01	17	11.41

$$\chi^2 = 12.466 \quad df = 4 \quad \text{PROB} = 0.0142$$

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score > 10 but ≤ 15 then quality = 2
 If quality score > 15 then quality = 3

TABLE XLIII
CHI SQUARE TABLE SHOWING INNOVATION BY POSITION STATUS

POSITION STATUS	LEVEL OF INNOVATION*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Full Time (> = 35 hours)	37	24.83	27	18.12	8	5.37
At least 20 hours, but 35	46	30.87	3	2.01	8	5.37
Less than 20 hours	15	10.07	4	2.68	1	0.67

$$\chi^2 = 20.095 \quad df = 4 \quad \text{PROB} = 0.0005$$

* Level of Innovation: If innovation score ≤ 4 then innovation = 1
 If innovation score > 4 but ≤ 6 then innovation = 2
 If innovation score > 6 then innovation = 3

TABLE XLIV
CHI SQUARE TABLE SHOWING TOTAL PERFORMANCE BY POSITION STATUS

POSITION STATUS	LEVEL OF TOTAL PERFORMANCE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Full Time (> = 35 hours)	2	1.34	4	2.68	66	44.30
At least 20 hours, but 35	4	2.68	14	9.40	39	26.17
Less than 20 hours	0	0	2	1.34	18	12.08

$$\chi^2 = 13.351 \quad df = 4 \quad \text{PROB} = 0.00097$$

* Level of Total Performance: If total score ≤ 60 then total = 1
 If total score > 60 but ≤ 90 then total = 2
 If total score > 90 then total = 3

TABLE XLV
CHI SQUARE TABLE SHOWING PRODUCTIVITY BY STATE

STATE	LEVEL OF PRODUCTIVITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Arkansas	1	0.65	6	3.92	32	20.92
Louisiana	0	0	6	3.92	23	15.03
New Mexico	0	0	1	0.65	1	0.65
Oklahoma	0	0	0	0	23	15.03
Texas	6	3.92	5	3.27	49	32.03

$$\chi^2 = 15.975 \quad df = 8 \quad \text{PROB} = 0.0427$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

TABLE XLVI
CHI SQUARE TABLE SHOWING TOTAL PERFORMANCE BY STATE

STATE	LEVEL OF TOTAL PERFORMANCE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Arkansas	0	0	6	3.92	33	21.57
Louisiana	0	0	8	5.23	21	13.73
New Mexico	0	0	1	0.65	1	0.65
Oklahoma	0	0	1	0.65	22	14.38
Texas	6	3.92	5	3.27	49	32.03

$$\chi^2 = 19.223 \quad df = 8 \quad \text{PROB} = 0.0137$$

* Level of Total Performance: If total score ≤ 60 then total = 1
 If total score > 60 but ≤ 90 then total = 2
 If total score > 90 then total = 3

TABLE XLVII
CHI SQUARE TABLE SHOWING QUALITY BY MARITAL STATUS

MARITAL STATUS	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	f	%	f	%	f	%
Never Been Married	0	0	0	0	3	1.96
Married	4	2.61	21	13.73	80	52.29
Widowed, Divorced or Separated	3	1.96	1	0.65	41	26.80

$$\chi^2 = 9.067 \quad df = 4 \quad \text{PROB} = 0.0595$$

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score > 10 but ≤ 15 then quality = 2
 If quality score > 15 then quality = 3

TABLE XLVIII
CHI SQUARE TABLE SHOWING INNOVATION BY MARITAL STATUS

MARITAL STATUS	LEVEL OF INNOVATION*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Never Been Married	1	0.65	0	0	2	1.31
Married	72	47.06	23	15.03	10	6.54
Widowed, Divorced, or Separated	27	17.65	13	8.50	5	3.27

$$\chi^2 = 10.779 \quad df = 4 \quad \text{PROB} = 0.0292$$

* Level of Innovation: If innovation score ≤ 4 then innovation = 1
 If innovation score > 4 but ≤ 6 then innovation = 2
 If innovation score > 6 then innovation = 3

TABLE XLIX
CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY TITLE

POSITION TITLE	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Meal Site Manager	13	8.50	14	9.15	56	36.60
Dietitian	3	1.96	9	5.88	4	2.61
Other	11	7.19	14	9.15	29	18.95

$\chi^2 = 13.577$ $df = 4$ $PROB = 0.0088$

* Level of Quality of Worklife: If QWL score ≤ 6 then QWL = 1
 If QWL score > 6 but ≤ 9 then QWL = 2
 If QWL score > 9 then QWL = 3

TABLE L
CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY PREVIOUS POSITION

PREVIOUS POSITION	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Cook	0	0	0	0	5	17.86
Social Worker	0	0	1	3.57	3	10.71
Home Delivery Coordinator	0	0	2	7.14	0	0
Driver	0	0	2	7.14	0	0
Site Worker	0	0	2	7.14	7	25.00
Custodian	0	0	0	0	1	3.57
Administrative Aide	1	3.57	0	0	0	0
Outreach Worker	1	3.57	1	3.57	2	7.14

$\chi^2 = 29.664$ $df = 14$ $PROB = 0.0085$

* Level of Quality of Worklife: If QWL score ≤ 6 then QWL = 1
 If QWL score > 6 but ≤ 9 then QWL = 2
 If QWL score > 9 then QWL = 3

TABLE LI
CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY R.D. STATUS

R.D. STATUS	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Registered and Licensed	2	1.31	8	5.23	3	1.96
Not Registered	24	15.69	28	18.30	82	53.59
Registered	1	0.65	1	0.65	4	2.61

$$\chi^2 = 11.324 \quad df = 4 \quad . \text{PROB} = 0.0232$$

* Level of Quality of Worklife: If QWL score ≤ 6 then QWL = 1
 If QWL score > 6 but ≤ 9 then QWL = 2
 If QWL score > 9 then QWL = 3

TABLE LII

CHI SQUARE TABLE SHOWING EFFECTIVENESS BY YEARS OF PREVIOUS EMPLOYMENT

YEARS OF PREVIOUS EMPLOYMENT	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1	2	3	4	5	6
	f	%	f	%	f	%
1	0	0	0	0	4	14.81
2	0	0	0	0	6	22.22
3	0	0	0	0	2	7.41
4	0	0	1	3.70	2	7.41
5	0	0	0	0	2	7.41
6	0	0	0	0	2	7.41
7	0	0	0	0	2	7.41
8	0	0	1	3.70	0	0
9	0	0	0	0	1	3.70
10	0	0	0	0	2	7.41
13	0	0	0	0	1	3.70
20	0	0	1	3.70	0	0

 $\chi^2 = 20.250$ $df = 11$ $PROB = 0.0420$

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score > 24 but ≤ 36 then effectiveness = 2
 If effectiveness score > 36 then effectiveness = 3

TABLE LIII
CHI SQUARE TABLE SHOWING QUALITY BY ROUTE TO REGISTRATION

ROUTE TO REGISTRATION	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Internship	0	0	1	5.26	14	73.68
Coordinated Undergraduate Program	0	0	1	5.26	0	0
Graduate Degree Plus Work Experience	0	0	0	0	3	15.79

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score >10 but ≤ 15 then quality = 2
 If quality score >15 then quality = 3

TABLE LIV
CHI SQUARE TABLE SHOWING INNOVATION BY SEX

SEX	LEVEL OF INNOVATION*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
Female	95	62.09	33	21.57	13	8.50
Male	5	3.27	3	1.96	4	2.61

$$\chi^2 = 6.918 \quad df = 2 \quad \text{PROB} = 0.0315$$

* Level of Innovation: If innovation score ≤ 4 then innovation = 1
 If innovation score > 4 but ≤ 6 then innovation = 2
 If innovation score > 6 then innovation = 3

APPENDIX J

T TESTS SHOWING PERFORMANCE MEASURES BY BENEFITS
AND PROFESSIONAL ORGANIZATION MEMBERSHIP

TABLE LV
T-TEST PROCEDURE FOR EFFECTIVENESS: BENEFITS

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Paid Vacation:				
Yes	114	2.48	0.76	0.0112
No	44	2.80	0.44	
Paid Holidays:				
Yes	113	2.78	0.48	0.0405
No	45	2.53	0.73	
Paid Sick Leave:				
Yes	111	2.81	0.42	0.0059
No	47	2.47	0.78	
Medical Plan:				
Yes	61	2.82	0.43	0.0341
No	97	2.64	0.63	
Paid Maternity Leave:				
Yes	12	2.92	0.29	0.0303
No	146	2.69	0.58	
Pension Plan:				
Yes	34	2.85	0.43	0.0494
No	124	2.67	0.59	

TABLE LVI

T-TEST PROCEDURE FOR PRODUCTIVITY: BENEFITS

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Paid Sick Leave:				
Yes	111	2.81	0.48	0.0384
No	47	2.55	0.77	

TABLE LVII
T-TEST PROCEDURE FOR QUALITY OF WORKLIFE: BENEFITS

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Paid Vacation:				
Yes	114	2.46	0.75	0.0243
No	44	2.11	0.87	
Paid Holidays:				
Yes	113	2.47	0.74	0.0123
No	45	2.09	0.87	
Paid Sick Leave:				
Yes	111	2.50	0.74	0.0023
No	47	2.04	0.86	
Accidental Death and Dismemberment Insurance:				
Yes	115	2.28	0.83	0.0195
No	43	2.58	0.66	

TABLE LVIII
T-TEST PROCEDURE FOR TOTAL PERFORMANCE: BENEFITS

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Paid Vacation:				
Yes	114	2.80	0.50	0.0388
No	44	2.55	0.73	
Paid Holidays:				
Yes	113	2.80	0.48	0.0521
No	45	2.56	0.76	
Paid Sick Leave:				
Yes	111	2.80	0.48	0.0393
No	47	2.55	0.75	
Accidental Death and Dismemberment Insurance:				
Yes	43	2.86	0.41	0.0364
No	115	2.68	0.63	

TABLE LIX

T-TEST PROCEDURE FOR EFFECTIVENESS: ORGANIZATION MEMBERSHIP

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
American Dietetic Association:				
Yes	17	2.94	0.24	0.0015
No	141	2.68	0.59	
Society for Nutrition Education:				
Yes	12	3.00	0	0.0001
No	146	2.68	0.58	

TABLE LX

T-TEST PROCEDURE FOR PRODUCTIVITY: ORGANIZATIONAL MEMBERSHIP

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
American Dietetic Association:				
Yes	17	3.00	0	0.0001
No	141	2.70	0.62	
Society for Nutrition Education:				
Yes	12	2.92	0.29	0.0558
No	146	2.73	0.61	
American Home Economics Association:				
Yes	4	3.00	0	0.0001
No	154	2.73	0.60	
Dietary Managers Association:				
Yes	3	3.00	0	0.0001
No	155	2.73	0.60	
Other:				
Yes	24	2.92	0.41	0.0347
No	134	2.70	0.61	

TABLE LXI

T-TEST PROCEDURE FOR QUALITY: ORGANIZATIONAL MEMBERSHIP

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
American Dietetic Association:				
Yes	17	2.88	0.33	0.0516
No	141	2.69	0.62	
Society for Nutrition Education:				
Yes	12	3.00	0	0.0001
No	146	2.68	0.62	
Dietary Managers Association:				
Yes	3	3.00	0	0.0001
No	155	2.70	0.60	

TABLE LXII

T-TEST PROCEDURE FOR QUALITY OF WORKLIFE: ORGANIZATION MEMBERSHIP

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
Society for Nutrition Education:				
Yes	12	2.83	0.58	0.0123
No	146	2.32	0.80	
Dietary Managers Association:				
Yes	3	3.00	0	0.0001
No	155	2.35	0.80	

TABLE LXIII

T-TEST PROCEDURE FOR TOTAL PERFORMANCE: ORGANIZATIONAL MEMBERSHIP

VARIABLE	N	MEAN	STD. DEV.	SIGNIFICANCE LEVEL
American Dietetic Association:				
Yes	17	2.94	0.24	0.0036
No	141	2.70	0.61	
Society for Nutrition Education:				
Yes	12	3.00	0	0.0001
No	146	2.71	0.60	
Dietary Managers Association:				
Yes	3	3.00	0	0.0001
No	155	2.72	0.59	

APPENDIX K

CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES
BY ATTITUDES TOWARD AGING

TABLE LXV
CHI SQUARE TABLE SHOWING PRODUCTIVITY BY ATTITUDES TOWARD AGING

ATTITUDES TOWARD AGING*	LEVEL OF PRODUCTIVITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	6	3.80	2	1.27	11	6.96
2	5	31.6	13	8.23	93	58.86
3	1	0.63	3	1.90	24	15.19

$$\chi^2 = 17.852 \quad df = 4 \quad \text{PROB} = 0.0013$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

** Attitudes toward aging: If attitude score ≤ 27 then attitude = 1
 If attitude score > 27 but ≤ 41 attitude = 2
 If attitude score > 41 then attitude = 3

TABLE LXIV

CHI SQUARE TABLE SHOWING EFFECTIVENESS BY ATTITUDES TOWARD AGING

ATTITUDES TOWARD AGING*	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	6	3.80	0	0	13	8.23
2	3	1.90	25	15.82	83	52.53
3	0	0	3	1.90	25	15.82

$$\chi^2 = 32.076 \quad df = 4 \quad \text{PROB} = 0.0001$$

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score > 24 but ≤ 36 then effectiveness = 2
 If effectiveness score > 36 then effectiveness = 3

** Attitudes toward aging: If attitude score ≤ 27 then attitude = 1
 If attitude score > 27 but ≤ 41 attitude = 2
 If attitude score > 41 then attitude = 3

TABLE LXVI
CHI SQUARE TABLE SHOWING QUALITY BY ATTITUDES TOWARD AGING

ATTITUDES TOWARD AGING*	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	6	3.80	3	1.90	10	6.33
2	4	2.53	16	10.13	91	57.59
3	2	1.27	3	1.90	23	14.56

$$\chi^2 = 18.839 \quad df = 4 \quad \text{PROB} = 0.0008$$

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score > 10 but ≤ 15 then quality = 2
 If quality score > 15 then quality = 3

** Attitudes toward aging: If attitude score ≤ 27 then attitude = 1
 If attitude score > 27 but ≤ 41 attitude = 2
 If attitude score > 41 then attitude = 3

TABLE LXVII
CHI SQUARE TABLE SHOWING TOTAL PERFORMANCE BY ATTITUDES TOWARD AGING

ATTITUDES TOWARD AGING*	LEVEL OF TOTAL PERFORMANCE *					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	6	3.80	3	1.90	10	6.33
2	4	2.53	14	8.86	93	58.86
3	1	0.63	4	2.53	23	14.56

$$\chi^2 = 20.946 \quad df = 4 \quad \text{PROB} = 0.0003$$

* Level of Total Performance: If total score ≤ 60 then total = 1
 If total score > 60 but ≤ 90 then total = 2
 If total score > 90 then total = 3

** Attitudes toward aging: If attitude score ≤ 27 then attitude = 1
 If attitude score > 27 but ≤ 41 attitude = 2
 If attitude score > 41 then attitude = 3

APPENDIX L

CHI SQUARE TABLES SHOWING PERFORMANCE MEASURES
BY POLITICAL ACTIVITIES

TABLE LXVIII

CHI SQUARE TABLE SHOWING EFFECTIVENESS BY POLITICAL ACTIVITIES

POLITICAL ACTIVITIES**	LEVEL OF EFFECTIVENESS*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	7	4.43	10	6.33	18	11.39
2	2	1.27	10	6.33	59	37.34
3	0	0	8	5.06	44	27.85

$$\chi^2 = 23.305 \quad df = 4 \quad \text{PROB} = 0.0001$$

* Level of Effectiveness: If effectiveness score ≤ 24 then effectiveness = 1
 If effectiveness score > 24 but ≤ 36 then effectiveness = 2
 If effectiveness score > 36 then effectiveness = 3

** Political Activities: If poliact score ≤ 14 then poliact = 1
 If poliact score > 14 but ≤ 21 poliact = 2
 If poliact score > 21 then poliact = 3

TABLE LXIX

CHI SQUARE TABLE SHOWING PRODUCTIVITY BY POLITICAL ACTIVITIES

POLITICAL ACTIVITIES**	LEVEL OF PRODUCTIVITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	8	5.06	4	2.53	23	14.56
2	4	2.53	7	4.43	60	37.97
3	0	0	7	4.63	45	28.48

$$\chi^2 = 16.699 \quad df = 4 \quad \text{PROB} = 0.0022$$

* Level of Productivity: If productivity score ≤ 16 then productivity = 1
 If productivity score > 16 but ≤ 24 then productivity = 2
 If productivity score > 24 then productivity = 3

** Political Activities: If poliact score ≤ 14 then poliact = 1
 If poliact score > 14 but ≤ 21 poliact = 2
 If poliact score > 21 then poliact = 3

TABLE LXX
CHI SQUARE TABLE SHOWING QUALITY BY POLITICAL ACTIVITIES

POLITICAL ACTIVITIES**	LEVEL OF QUALITY*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	6	3.80	9	5.70	20	12.66
2	5	3.16	8	5.06	58	36.71
3	1	0.63	5	3.16	46	29.11

$\chi^2 = 13.763$ $df = 4$ $PROB = 0.0081$

* Level of Quality: If quality score ≤ 10 then quality = 1
 If quality score > 10 but ≤ 15 then quality = 2
 If quality score > 15 then quality = 3

** Political Activities: If poliact score ≤ 14 then poliact = 1
 If poliact score > 14 but ≤ 21 poliact = 2
 If poliact score > 21 then poliact = 3

TABLE LXXI

CHI SQUARE TABLE SHOWING QUALITY OF WORKLIFE BY POLITICAL ACTIVITIES

POLITICAL ACTIVITIES**	LEVEL OF QUALITY OF WORKLIFE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	13	8.23	13	8.23	9	5.70
2	15	9.49	16	10.13	40	25.32
3	4	2.53	8	5.06	40	25.32

$$\chi^2 = 23.018 \quad df = 4 \quad \text{PROB} = 0.0001$$

* Level of Quality of Worklife: If QWL ≤ 6 then QWL = 1
 If QWL > 6 but ≤ 9 then QWL = 2
 If QWL > 9 then QWL = 3

** Political Activities: If poliact score ≤ 14 then poliact = 1
 If poliact score > 14 but ≤ 21 poliact = 2
 If poliact score > 21 then poliact = 3

TABLE LXXII

CHI SQUARE TABLE SHOWING TOTAL PERFORMANCE BY POLITICAL ACTIVITIES

POLITICAL ACTIVITIES**	LEVEL OF TOTAL PERFORMANCE*					
	LOW		MEDIUM		HIGH	
	1		2		3	
	f	%	f	%	f	%
1	7	4.43	8	5.06	20	12.66
2	4	2.53	7	4.43	60	37.97
3	0	0	6	3.80	46	29.11

 $\chi^2 = 18.444$ $df = 4$ $PROB = 0.0010$

* Level of Total Performance: If total score ≤ 60 then total = 1
 If total score > 60 but ≤ 90 then total = 2
 If total score > 90 then total = 3

** Political Activities: If poliact score ≤ 14 then poliact = 1
 If poliact score > 14 but ≤ 21 poliact = 2
 If poliact score > 21 then poliact = 3

~
VITA

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Candidate for the Degree of

Doctor of Philosophy

Thesis: ANALYSIS OF SELECTED MANAGEMENT PERFORMANCE MEASURES AND THE
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